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"The Problem of the Different Fiscal Capacities of Local Units of Government".

(An Investigation into the Operation of the Exchequer Equalisation Grant and The General Grant in Scotland.)

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by

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C O N T E N T S

T A B L E S

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PREFACE.

This study is concerned with a special problem of inequality which arises from the different fiscal capacities of local units of government in a politically decentralised system of government. In so far as the tax bases of the local governmental units are different there arises unequal treatment of equals residing in areas of different taxable capacity. The attempt to solve this problem through the operation of a differential grant system is an example of a particular application of the general principle of "the equal treatment of equals".[1]

Government grants bulk large in the finances of local authorities in this country. At the present time more than fifty per cent of local authority income is derived from grants-in-aid and an increasing proportion of such grants has taken the form of "block grants" distributed on some basis which has regard to the different tax bases and needs of the local authorities. Comparatively little has as yet been done by economists to apply economic analysis to the evaluation of the success of this policy. While the literature of public finance includes many excellent books on the system of government grants these have been mainly of an administrative or descriptive character and there has been little attempt to apply analytical methods to the interpretation of grant / -

1. Equal treatment of equals can, of course, only be true in some broad sense. Individual compensation is here, as in all public activities financed by taxation, an impossibility. See Kjeld Philip, Inter-governmental Fiscal Relations, Institute of Economics and History, Copenhagen 1954, P.127.

grant systems. If this is true, in general, for England and Wales it is even more so for Scotland where there has been a dearth of literature on the subject of equalisation grants.[1]

The study has in effect three objects. The first object is to discuss the general principles of different forms of equalisation grants and to provide formulae for achieving equalisation according to different concepts of equalisation. The second is to demonstrate the application of these principles and concepts in the various attempts at equalisation in Scotland, particularly in the Exchequer Equalisation Grant and the General Grant. In making this investigation I have been mindful of the remarks of J.R. and Mrs. Ursula Hicks who, writing in 1944 in their book, The Incidence of Local Rates in Great Britain, said,

> "Her distinctive institutions naturally tempt the student of English local government to leave Scotland as a terra incognita; but since we share the same central government with the Scots, the student of English public finance is negligent if he does not investigate. It is extremely important that the institutions of England and of Scotland should be continually compared, and translated into one another's terms; otherwise their common finances can hardly be conducted with justice to each".

Wherever possible, therefore, the institutions of both countries and their / -

1. This has to some extent been rectified recently. See C.S. Page, Local Finance in Scotland, Section B., Non Specific Grants, Wm. Hodge & Co., Ltd., 1962.

their different practice in relation to Equalisation Grants has been compared. The third object is to provide statistical data on the operation of the Exchequer Equalisation Grant and General Grant in Scotland in an attempt to evaluate the success of the policy of equalisation.

The work is divided into two parts. Part I discusses the principles of equalisation grants and describes the history of equalisation in this country. Part II consists of an empirical investigation into the operation of the Exchequer Equalisation Grant and the General Grant in Scotland. Ch.I contains a discussion of possible interpretations of what is meant by equalisation and provides in generalised mathematical terms formulae for achieving equalisation for different concepts of equalisation. In subsequent chapters these formulae are used as an interpretative device for analysing the nature of the different approaches to equalisation which have been attempted in Scotland, England and Wales. Ch. II consists of a brief description of the framework of local government and the nature of its tax base, viz., rateable value, an understanding of which is necessary for the later discussion of the history of equalisation (Ch. III), the Exchequer Equalisation Grant (Ch. Iv) and the General Grant (Ch. V.). The empirical investigation is contained in Chs. VI - IX. Ch.IX discusses the vexed question of the extent to which rateable value is an indicator of the "ability to pay" of the different areas and consequently the extent to which it should be used in an equalisation grant formula. The conclusion is reached that it is an unreliable indicator but that there is no alternative indicator which is more reliable. With a tax system such as the rating system where the tax paid is not related to

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the income of the taxpayer it is not possible to evolve a grant system whereby any particularly meaningful form of equalisation can be achieved. Certain policy conclusions follow from this if equalisation is considered to be a desired objective. Either the tax base of local authorities requires to be altered to one which is more closely related to the incomes of those subject to the local tax or the major functions of local authorities which are of a national character such as education should be transferred to or wholly financed by the central government. Given the present climate of opinion in this country it is unlikely that any alternative tax system such as a local income tax would be acceptable. The solution therefore lies in a re-examination and re-definition of the functions of local authorities.

While it has not been possible to provide a ready made solution within the present framework it is hoped that many of the points brought out in this thesis are capable of application to a system where the tax base is related to income as, for example, in Sweden. Others again may see possibilities for applying the formulae as also some of the findings of the investigation to the study of international grants-in-aid.

Acknowledgements are due to Mrs. Hicks and D.N. Chester since it was the reading of their works which first stimulated my desire to undertake some research into the relationship between local finance and national finance. I am also indebted to the officials of the Central Department who supplied me with much detailed information including the Exchequer Equalisation and General Grant calculations for all the local authorities in Scotland, to the Scottish Branch of the Institute of Municipal Treasurers and Accountants and the Association of County Treasurers / -

Treasurers for giving my questionnaire to the Scottish Counties and Large Burghs official backing. The greater part of this thesis was completed while I was employed by Midlothian County Council. My thanks are therefore due to this body and in particular to the County Clerk (Mr. James McBoyle, C.B.E.) and the County Treasurer (Mr. James B. Hutcheson) who gave me every encouragement and provided me with many facilities for undertaking this investigation. This was but one example of the generally enlightened attitude to study which characterised this authority. Thanks are also due to Mr. G.B. Esslemont, C.B.E., City Chamberlain, Glasgow, who read and gave me the benefit of his views on certain chapters.

Finally I am indebted to my supervisor, Professor Alan T. Peacock, formerly Professor of Economic Science, University of Edinburgh and now Professor of Economics, University of York, not only for suggesting the specific subject of enquiry but also for the much wider appreciation of the nature of the problem which I gained in the course of many discussions with him. Not the least of the benefits which I have obtained in the course of this study has been the broadening of my knowledge of economics through contact with Professor Peacock, the members of his staff and my fellow post-graduate students at Edinburgh.

P A R T I

PRINCIPLES AND HISTORY

OF

EQUALISATION GRANTS

CHAPTER I.

THE PROBLEM OF EQUALISATION AND FORMULAE FOR ACHIEVING THE DIFFERENT CONCEPTS OF EQUALISATION.

1. The Problem of Equalisation.

This study is concerned with a problem in public finance which emerges in a de-centralised political system, viz., that of the different fiscal capacities of the local units of government to provide services - a situation which is aggravated where the local units of government are responsible for the provision of services of a national or semi-national character which have large spillover effects such as education. If the local units of government were miniature economic replicas of the larger national economy this problem would not arise but we know that in real life this is never so. Certain geographical areas which form the bases of the local units of government are inhabited by relatively high income receivers while others again comprise relatively low income groups. Consequently the areas of low income are inhibited in their efforts to provide an adequate standard of service. Apart from the effects of differences in income there are, in addition, certain natural conditions present in the areas of some authorities, e.g., sparsity, which make the provision of services such as education more expensive to provide. This problem has been the subject of a fair amount of discussion by writers on public finance although mainly in relation to the situation between states and the federal government in a federal country; but the principles are equally / -

equally applicable to the relationship between local authorities and the central government such as subsists in this country.

Certain writers see the solution to this dilemma to lie in the transfer of the major functions to the central government. This of course is to destroy the very system which it may be desired to preserve and thus while I would not deny the cogency of some of the arguments in favour of the transfer of certain functions to the central authority, primarily we shall be looking elsewhere for our solution.

A way of solving this problem within the framework of a de-centralised political system is for the central authority to tax the areas of high income and to transfer the surplus to the areas of low income. This adjustment is generally made via the grant system.[1] Even if it were not thought necessary to pay grant to all authorities the doing of this makes the system politically more acceptable for it disguises the real nature of the operation which is essentially a taxing of the areas of high income/low need and a subsidising of the areas of low income/high need. By paying grant to all it is as though we raised the income base of all in the first place and then proceeded to reduce that for those of high income and correspondingly increased it for those of low income.

To the economist primarily interested in efficient resource allocation equalisation / -

1. For another suggested method see J.M. Buchanan, "Federalism and Fiscal Equity", American Economic Review, Vol.XL (Sept.1950), pp. 583-99 reprinted in Readings in the Economics of Taxation (Richard D. Irwin, Inc., 1959) pp. 93-109.

equalisation as an objective may be questioned.[1] A.D. Scott has contended that equalisation grants are resource distorting in that they result in the subsidising of the less economic areas of a country and this may tend to prevent the movement of factors of production to other areas in which they could be more productively employed and which would result in a greater total gain to the nation. J.M.Buchanan on the other hand has endeavoured to show that equalisation grants may be resource correcting rather than resource distorting. Interesting and indeed important as this discussion is, it is not primarily the subject of this study. Our objectives have been set out for us by a policy which aims at equalisation.

Discussion of equalisation requires that we define our concepts of equalisation. Apart from any conceptual difficulties as to whether equalisation in the broader and all-embracing sense is particularly meaningful, equalisation in the narrower sense may be directed towards different aims. It is perhaps as well to dispose of what is regarded as the less sensible interpretations of equalisation having regard to the whole raison d'etre of a politically decentralised system of government.

An / -

1. A.D. Scott, "A Note on Grants in Federal Countries" - Economica Vol. XVII (Nov. 1950).
J.M. Buchanan, "Federalism and Fiscal Equity" - American Economic Review Vol. XL (Sept. 1950).
J.M. Buchanan, "Federal Grants and Resource Allocation" - Journal of Political Economy Vol. LX (June 1952).
A.D. Scott, "Federal Grants and Resource Allocation - A Reply" - Journal of Political Economy Vol. LX (Dec. 1952).
J.M. Buchanan, "Federal Grants and Resource Allocation - A Reply" - Journal of Political Economy Vol. LX (Dec. 1952).

An equalisation plan whereby the central government sought to equalise the per capita expenditures of the local units of government would not be acceptable because equal expenditures do not represent equal performance levels but also because such a plan would offend against the principle of freedom of action on the part of the local units. For the same reason a plan which aimed at an equalisation of performance levels may also be discarded.[1] An equalisation of tax rates is also not a reasonable objective of an equalisation scheme for unless equal tax rates represent equal tax burdens and equal benefits there is no justification for tax rates being equal.[2] It is also considered that an equalisation of standards of service is not possible within the frame-work of a de-centralised political system. Indeed it is this freedom on the part of the local inhabitants of the various areas to choose within limits the different standards of public services which they will enjoy and consequently the different tax rates which they will need to impose which forms one of the desirable attributes of such a system.[3] If equalisation of standards of performance is the objective, central finance must take the place of local finance.[4]

1. For plans which aim at these approaches to equalisation see R.A. Musgrave, "Approaches to a Fiscal Theory of Political Federalism", Public Finances: Needs, Sources and Utilization, (National Bureau of Economic Research), Princeton University Press, 1961.
2. Kjeld Philip, Intergovernmental Fiscal Relations, Institute of Economics and History, 1954, pp. 126-130.
3. Chas. M. Tiebout, "A Pure Theory of Local Expenditures", Journal of Political Economy, Vol.LIV (October 1956), pp. 416-424.
4. R.A. Musgrave, op. cit.

Indeed it may even be doubted whether given central finance, a high degree of equalisation of services for all areas may be pursued as an objective of public policy without so seriously conflicting with other important economic aims of the nation as to render it impracticable. For example, would it ever be possible even for the central government to provide educational facilities in the Crofting Counties of Scotland comparable to the facilities possible in a capital city such as Edinburgh or in a large industrial city like Glasgow? It has been thought wise to dispose of what may be regarded as the less meaningful approaches to equalisation for in my view much of the discussion on equalisation in this country has suffered from a lack of precision in defining at the outset the proper concepts of equalisation and it is not unknown for almost all of the foregoing approaches to be at one time or another implicitly included as objectives in such discussion.

We pass now to what may be regarded as the more meaningful concepts of equalisation within a politically de-centralised system. The first of these is where the central authority seeks to give each authority the same per capita tax potential so that each is provided with the same ability to incur expenditure if it wishes to avail itself of it. This scheme may be carried a stage further by having regard also to the differing needs of authorities thus giving each the same tax potential in relation to its needs. The other approach is where the object is to provide each authority with the fiscal capacity or means to provide a certain standard of service according to some centrally set level of performance and to give each the means whether in fact it chooses to make use of it in the provision of public services or not.

It / -

It is now proposed to provide in mathematical terms formulae for achieving these objectives. Since this study is concerned with the achieving of equalisation via a grant system these plans are expressed in terms which provide for a contribution being made by the central authority but at the same time the opportunity is taken of relating these plans to those of Musgrave which are of a purely redistributional character and involve no contribution from the central fisc.[1] Since regard must be had to the overall fiscal position taking central and local taxes together it is obvious that ideally equalisation schemes should take account of the nature of the tax structure of the central fisc, e.g., whether it is progressive or proportional and also that of the local tax structure and the objective of the overall tax system. Initially it is assumed that the central tax and local tax systems are both proportional and that the aim is an overall proportional system. It is also assumed that the tax base may be defined as private income in the area of the authority. The following symbols are used: -

1. R.A. Musgrave, op.cit for a full discussion of the concepts of equalisation and plans for achieving these on a purely redistributional basis. See however the present writer's note on Musgrave's formulae, Append. No.1.

n = number of states or local authorities

S_i = per capita subsidy (+ or -) received by the i th authority in £s

A_i = per capita outlay by the i th authority in £s

N_i = index of need in i th authority

t_i = tax rate in i th authority

t_c = tax (+) or subsidy (-) rate of central government required to clear the central budget

t_s = a standard rate

B_i = per capita tax base of i th authority

m = minimum outlay per unit of need

p_i = population of i th authority

Use of bars indicates weighted averages, e.g.

$$\bar{B} = \frac{B_a p_a + B_b p_b + \ldots\ldots B_n p_n}{p_a + p_b + \ldots\ldots p_n}$$

$$= \frac{\sum_i (B_i p_i)}{\sum_i p_i}$$

2. An Equalisation of Fiscal Potential.

The object is to provide each authority with the same per capita tax potential so that each authority may raise the same revenue and thus incur the same expenditure per head by levying the same tax rates.

Assume 3 authorities 1, 2, and 3 out of a larger number of authorities.

Assume -

A_1 = £20; A_2 = £20; A_3 = £20

B_1 = £98; B_2 = £119; B_3 = £168

$\bar{B}$ = £140

The definitional equation is $A_i = B_i t_i + S_i$

In the absence of any subsidy their tax rates would be -

$\frac{A_1}{B_1} = \frac{20}{98} =$ 4s. 0d; $\frac{A_2}{B_2} = \frac{20}{119} =$ 3s. 4d;

$\frac{A_3}{B_3} = \frac{20}{168} =$ 2s. 5d.

A per capita subsidy based on the following formula is paid -

$$S_i = (\bar{B} - B_i) \times \frac{A_i}{\bar{B}} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (1)$$

Since $t_i = \frac{A_i}{\bar{B}}$ the formula may be alternatively stated -

$$S_i = (\bar{B} - B_i)t_i \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (1a)$$

The subsidies are therefore -

$$S_1 = (140 - 98) \times \frac{20}{140} = +£6$$

$$S_2 = (140 - 119) \times \frac{20}{140} = +£3$$

$$S_3 = (140 - 168) \times \frac{20}{140} = -£4$$

The tax rates will then be -

Authority 1: $\frac{A_1 - S_1}{B_1} = \frac{£20 - 6}{98} = 2/11$

do. 2: $\frac{A_2 - S_2}{B_2} = \frac{£20 - 3}{119} = 2/11$

do. 3: $\frac{A_3 - S_3}{B_3} = \frac{£20 + 4}{168} = 2/11$

Such a formula, therefore, enables all authorities to incur the same per capita expenditure by levying the same tax rate. If one authority spends more than another its tax rate will be proportionately higher. It is this property of the Exchequer Equalisation Grant which has been described as "proportionality" of rate poundages, i.e., the rate poundages of receivers vary in direct proportion to their expenditure per head of population.

It will be seen from the subsidy formula -

$$S_i = (\bar{B} - B_i) \times \frac{A_i}{\bar{B}} \quad \ldots \quad \ldots \quad \ldots \qquad (1)$$

that the rate of change of S_i with respect to A_i is as follows -

$$\frac{dS_i}{dA_i} = \frac{\bar{B} - B_i}{\bar{B}}$$

The / -

The partial derivative is positive when $\bar{B} > B_i$ and negative when $\bar{B} < B_i$. Therefore, in the case of an authority whose tax base is less than the average tax base, an increase in its per capita expenditure increases its subsidy. In the case of an authority whose tax base is above the average, an increase in its per capita expenditure reduces its subsidy (or rather increases the tax imposed on it).

This may be looked at in another way.

The subsidy -

$$S_i = (\bar{B} - B_i) \times \frac{A_i}{\bar{B}} \quad \ldots \ldots \quad (1)$$

may be alternatively stated -

$$S_i = \frac{(\bar{B} - B_i)}{\bar{B}} \times A_i$$

in which case it is seen to be a proportion (or percentage) of the expenditure. If the per capita tax base is greater than the average per capita tax base the percentage will be negative in sign. In the examples quoted above the percentages for authorities 1, 2, and 3 are 30%, 15%, and −20%. Thus for every increase of, say, £10 in their per capita expenditures authorities 1 and 2 would get an additional subsidy of £3 and £1. 10/- respectively, while authority 3 would require to pay out another £2 by way of a tax. It is this property which has caused the Exchequer Equalisation Grant to be described as a percentage grant, each authority's percentage being uniquely determined by the ratio of (1) the difference between its tax base and the average tax base, and (2) the average tax base.

Thus / -

Thus the system described above, if applied without modification, would have an extremely disincentive effect on above-average base authorities increasing their expenditure. This objection may be met by applying the formula only to those authorities whose tax base is less than average, no adjustment being made to those with above average per capita tax base. As will be seen, this is what is done in the case of the English Exchequer Equalisation Grant or Rate Deficiency Grant. It is possible to vary the formula by fixing a datum line other than the average per capita tax base as the desired minimum up to which per capita tax bases should be raised. This is what is done in the case of the Scottish Exchequer Equalisation Grant.

In Musgrave's redistributional scheme the subsidies to the receiving authorities are obtained by taxing the non-receiving authorities, no contribution being made by the central authority. The scheme must, therefore, meet the condition -

$$\Sigma_i (p_i \, S_i) \quad = \quad O$$

From formula (1) $S_i = (\bar{B} - B_i) \times \frac{A_i}{\bar{B}}$ it is seen that each authority's subsidy is a function of its own expenditure; hence the sum of the subsidies of all authorities will not necessarily equal zero. It may be either positive or negative. In order to clear the central budget a central tax rate, which may be either + or - is, therefore, applied to the individual tax bases of the authorities. The formula is thus -

$$S_i = (\bar{B} - B_i)\, t_i - B_i t_c \quad \ldots \quad \ldots \quad \ldots \quad (2)^1$$

3. An Equalisation of Fiscal Potential in Relation to Needs.

While the previous plan equalised fiscal potential it neglected the differing needs of authorities.

The following plan endeavours to equalise fiscal potential in relation to needs.

As before, the definitional equation is - $A_i = B_i t_i + S_i$

A per capita subsidy is then paid based on the following formula -

$$S_i = (\bar{B} - B_i)\, t_i + (N_i - \bar{N})\bar{B} t_i \quad \ldots \quad \ldots \quad (3)$$

The first part of this equation is similar to formula (1) In the second part of the equation the difference in need is applied to the yield from the equalised tax base. Here again, to avoid the disincentive effects on above average base authorities, the formula may be applied only to below average base or below "datum line" authorities.

In the redistributional scheme, again the condition must be met that -

$$\Sigma_i (p_i S_i) = 0$$

The / -

1. Plan 4. Richard A. Musgrave, op.cit.
See also for a discussion of the distribution effects of the formula.

The central budget is, therefore, cleared by adding to formula (3) the term $- B_i t_c$, thus providing the following formula -

$$S_i = (\bar{B} - B_i)\, t_i + (N_i - \bar{N})\, \bar{B} t_i - B_i t_c \quad \ldots \quad \ldots \quad (4)^1$$

In the foregoing plans the emphasis is on potential. Since it is potential which is being equalised, grant is paid to an authority only to the extent to which it wishes to avail itself of it by reason of its own tax effort. If it wishes to provide or expand the services, more grant is forthcoming. If it does not, then less grant is paid to it. It is obvious that for a grant to achieve this type of equalisation the subsidy must be a function of the individual authority's expenditure and this is an essential feature of both of these formulae.

It is important to appreciate the philosophy and political significance of this approach to equalisation. The idea behind this philosophy is that each authority should be provided with the ability in terms of tax potential to provide a necessary standard of service while leaving each free to determine its own level of activity, but that assistance will only be given to the extent to which each authority wishes to avail itself of it. In making allowances for need on the expenditure side the same principle is applied, viz., that assistance is only provided to the extent to which the authority wishes to take advantage of it. If we consider the part of the formula - /

1. Plan 6. Richard A. Musgrave, op. cit.
See also for discussion of distribution effects of formula.

formula -

$$S_i = (\bar{B} - B_i)\, t_i + (N_i - \bar{N})\, \bar{B}t_i$$

dealing with need $(N_i - \bar{N})\, \bar{B}t_i$, it is seen that the amount of subsidy earned by an authority where need is greater than average need is a function of the authority's own tax rate. Hence the greater its own tax effort is the greater will be the amount of grant received in respect of its need. The formula, therefore, is perfectly logical and consistent both in its equalisation of the resources side and the need or expenditure side, since it endeavours to put into effect a particular approach to the problem.

4. Equalisation of Fiscal Capacity to Provide a Standard of Service According to a Centrally Set Level of Performance.

We now pass to a fundamentally different approach to equalisation from that previously considered. Here the object is to provide each authority with the fiscal capacity or means to provide a certain standard of service according to a centrally set level of performance. The central authority decides what should be spent in respect of a particular service and then pays grant to the authorities to enable them to do so whether, in fact, the authority decides to spend it or not. Regard is had to the differing tax bases and needs of the authorities. Those authorities who spend exactly what the central authority has fixed as the 'standard expenditure' for the service will have equal tax rates. If, however, any authority chooses to spend in excess of this centrally set level of expenditure it must bear the full cost itself and conversely if it chooses to spend less, the full amount of the saving accrues to it.

The / -

The definitional equation is -

$$A_i = B_i t_i + S_i$$

A per capita subsidy based on the following formula is paid -

$$S_i = C + m(N_i - \bar{N}) + t_s(\bar{B} - B_i) \quad \ldots\ldots \quad (5)$$

The first part of the equation is a constant (C) which must meet the condition -

$$C = \frac{\sum_i (p_i S_i)}{\sum_i p_i}$$

Thus the value of the constant is equal to the total grant paid by the central authority divided by the aggregate population of all authorities. The second part of the formula $m(N_i - \bar{N})$ is the minimum outlay necessary to achieve a centrally set level of performance (m) applied to the difference between the authority's standard of need and the standard or average need. The third part of the formula is a standard or uniform rate applied to the difference between the per capita tax base and the average per capita tax base.

The standard rate must be such that applied to the average tax base it will provide the required revenue for an authority of average base and need. If the total subsidy paid by the central authority is say 50 per cent of the standard expenditure then the formula must meet the condition that

$$t_s \bar{B} = \tfrac{1}{2} m \bar{N}$$

Example

Assume a system which comprises 3 authorities 1, 2, and 3 as follows -

1 / -

	1	2	3	Total
Population (p_i)	10,000	20,000	30,000	60,000
No. of pupils	2,000	3,000	3,000	8,000
Ratio of pupils to population (N_i)	.2	.15	.1	.133

Assume that the necessary minimum outlay per pupil as fixed by the central authority is £66 and that the aggregate grant paid is 50 per cent of the standard expenditure for education for the system -

Standard Expenditure for system (8,000 x£66) = £528,000

Grant (50%) = £264,000

If we assume that the per capita tax bases of authorities 1, 2, and 3 are the same we can drop the third part of the formula $t_s(\bar{B} - B_i)$ leaving for the moment

$$S_i = C + m\ (N_i - \bar{N})$$

$$\text{Now } C = \frac{\sum_i (p_i S_i)}{\sum_i p_i}$$

$$= \frac{£264,000}{60,000}$$

$$= £4.4$$

The per capita subsidies will then be -

Authority 1

$$S_1 = 4.4 + 66\ (.2 - .133) = £8.822$$

Authority 2

$$S_2 = 4.4 + 66\ (.15 - .133) = £5.522$$

Authority 3 / -

Authority 3.

$S_3 = 4.4 + 66 (.1 - .133) = £2.222$

Now if authorities 1, 2 and 3 were in fact to spend exactly the minimum outlay per unit of need their expenditures would be -

1	2	3
£132,000 (2,000 x £66)	£198,000 (3,000 x £66)	£198,000 (3,000 x £66)

and their per capita expenditures -

	£13.2	£9.90	£6.60
Deduct subsidy	8.822	5.522	2.222
Net expenditure to be met by authority	£4.378	£4.378	£4.378

The formula would therefore succeed in leaving each authority with the same per capita expenditures and since the authorities have the same tax bases they would be able to levy the same tax rates to meet the expenditure.

Now supposing the authorities have different tax bases as follows -

	1	2	3	Total
Tax Base	£200,000	£580,000	£420,000	£1,200,000
. . Per Capita Tax Base	£20	£29	£14	£20

Now $t_s \bar{B} = \frac{1}{2} m \bar{N}$

$\therefore \quad 20t_s = \frac{66 \times .133}{2}$

$t_s = \frac{66 \times .133}{2 \times 20}$

$= .219$

The / -

The adjustment in respect of the third part of the formula $t_s(\bar{B} - B_i)$ will be -

Authority 1

$$S_1 = t_s(\bar{B} - B_i) = .219\ (20 - 20) = 0$$

Authority 2

$$S_2 = t_s(\bar{B} - B_2) = .219\ (20 - 29) = -£1.971$$

Authority 3

$$S_3 = t_s(\bar{B} - B_3) = .219\ (20 - 14) = £1.314$$

Then

	1	2	3
Net Expenditure (see previous page)	£4.378	£4.378	£4.378
Subsidy adjustment in respect of different tax bases	-	+1.971	-1.314
	£4.378	£6.349	£3.064
Per Capita Tax Base	£20	£29	£14
. . Tax Rate required	£.2189	£.2189	£.2189

For the purely redistributional scheme, since there is no grant payable, it is necessary that $t_s\bar{B} = m\bar{N}$. To obtain the formula for the redistributional scheme all that is necessary is to drop the constant (C) from formula (5), thus giving the following formula -

$$S_i = m(N_i - \bar{N}) + t_s(\bar{B} - B_i) \quad \ldots \quad \ldots \quad (6)$$

Since / -

Since the sum of the individual per capita measures of need for the total of the populations of all the authorities equals the sum of the average or standard need for the whole population of all authorities[1] the sum of the $(N_i - \bar{N})_s$ equals zero. Similarly the sum of the $(\bar{B} - B_i)$s equals zero. It therefore follows that

$$\sum_i (p_i S_i) = 0$$

It will be noted that no further adjustment is necessary to clear the central budget. This arises because the subsidy formula is not a function of the individual authorities' expenditures, the gains and losses being related to arbitrary sums, e.g., m and t_s. In formula (4) (the equalisation of fiscal potential in relation to need) a term to clear the central budget is required since the gains and losses in the formula are related to the authority's own tax rates (t_i) which are functions of the individual authorities' expenditures.

5. Comparative Merits of Different Approaches to Equalisation.

Each of these approaches to equalisation is equally tenable depending upon /

1. By definition $\bar{N} = \frac{\sum_i (N_i p_i)}{\sum_i p_i}$

$$\therefore \sum_i (\bar{N}_i p_i) = \sum_i \left\{ \frac{\sum_i (N_i p_i) p_i}{\sum_i p_i} \right\} = \frac{\sum_i p_i}{\sum_i p_i} \sum_i (N_i p_i) = \sum_i (N_i p_i)$$

upon one's political outlook, or one's particular set of value judgments. It will be seen in the course of this study that the first approach viz. an equalisation of fiscal potential in relation to needs is one which has apparently appealed to the Labour party in this country while the second approach viz. an equalisation of fiscal capacity to provide a standard of service according to some centrally set level of performance is one which has appealed to the Conservative party. My task however is primarily that of exposition and analysis and in discussing the disadvantages of either type of Grant it is not my intention to make value judgments but merely to direct attention to features which it is essential to recognise.

It has been seen that the grant in formula (1) may be looked at as a particular type of percentage grant, each authority's percentage being uniquely determined by the ratio of (1) its deficiency in per capita tax base from the average or "datum" tax base to (2) the average or "datum" tax base. Formula (3) although somewhat more complicated has similar features which render it a type of percentage grant. Such a grant may, therefore, be objected to on the grounds of its substitution effects. It could result in receivers of the grant (particularly if they enjoy high percentage rates of grant) being tempted to take more of their satisfactions through the public sector than they would otherwise have done if they had had average tax potential in their own right and thus did not qualify for subsidy. This seems of some importance when we consider that in this country the dividing line between public and private provision of certain services is narrow, / -

narrow, e.g. Education and Housing[1]. It would seem then that this type of grant will in respect of "receiving authorities" lead to an expansion of the public services provided by these authorities. In addition in so far as it operates as a particular kind of percentage grant the Central Government cannot control the amount of its expenditur e in the provision of the subsidy. In the terminology of Mrs. Hicks it is "open-ended".

The second type of grant while free from these defects has other disadvantages. Musgrave has drawn attention[2] to the fact that the equivalent re-distributional formula gives rise to the fact that some states are called upon to contribute to the services of others which, while needy, refuse to make an adequate effort of their own. While the position is not quite analagous for the pure subsidy formula, in the system as applied in this country whereby the total grant to be distributed is related to certain aggregate local authority expenditures a somewhat similar disadvantage is present. For an exemplication of this we require to wait until Ch.V where we deal with the General Grant.

6. On the Possibility of An Equalisation Grant Formula based on Regression Analysis.

Some work done by Solomon Fabricant on the factors associated with differences in the per capita expenditures of the State and local governments in the 48 states (as they then were) in the United States in 1942 suggested interesting possibilities for the use of regression analysis in devising an equalisation grant formula.

1. For a different view see Local Expenditure and Exchequer Grants, I.M.T.A. Research Study, 1956.

2. R.A. Musgrave, op.cit. p.lll.

He tested the relationship between differences in the per capita expenditures of the State and local governments with the three factors of income, urbanization and density[1] which previous research in this field has pointed to as being the most important factors associated with differences in per capita expenditures.

He expressed the relationships in the form of regression equations for each of the main services, e.g. Education, Health, etc., his equation for total per capita expenditures being -

$$E = 3.3 + .0822\ I + .1271\ U - .0396D$$

where

E = per capita state and local government expenditure in dollars.

I = per capita personal dollar income in a state.

U = an urbanization measure.

D = density, population per square mile.

In attempting to devise an equalisation grant formula the approach was as follows. The object of the equalisation grant is (1) to make allowances for those differences in expenditure which are due to factors outwith the control of authorities, e.g. sparsity, and (2) to make allowances for differences in the relative incomes of the inhabitants of the areas of the different local authorities. It is also desired that the formula should be free from the substitution effects present in the first concept of equalisation.

1. S. Fabricant, Trend of Government Activity 1900 - 1950 - National Bureau of Economic Research, 1952 - the chapter on "Interstate differences in Activity".

equalisation. If then we could determine the factors which cause differing expenditures and measure the extent to which these factors are associated with differing expenditures per head we might construct a formula for distributing grant which would make allowances on the expenditure side for those differences in per capita expenditures due to external factors outwith the control of the authorities and at the same time would equalise per capita incomes or rather that part of per capita incomes which is devoted to the public services.

The flaw in this approach may be already apparent to the reader but it is considered worthwhile pursuing this line of thought since it is evident that there are other investigators of equalisation grants who believed this approach to be fruitful.[1]

Now ignoring for the moment any problems of multicollinearity which might arise, supposing it were possible to do a regression analysis of per capita local authority expenditures in this country which would account for the major part of differences in expenditures and that the regression equation was -

$$E = 2 + .2I + .1x - .3y$$

where / -

1. J.B. Woodham, "General Grant or Poll Tax", Local Government Finance, August, 1961.

   See also Lawrence Boyle, "General Grant or Poll Tax", Local Government Finance, November, 1961.

where

E = per capita local authority expenditure.

I = per capita personal income in £s in the area of the local authority.

x = an independent factor not correlated with the other independent factors.

y = an independent factor not correlated with the other independent factors.

This equation may be interpreted as meaning that for every increase or decrease in per capita income of £1 (the factors of x and y being held constant) there is associated with it an increase or decrease in per capita expenditure of £.2 and for every increase of 1 unit of factor x (I and y held constant) there is an increase of £.1 in per capita expenditure and for an increase of 1 unit of y(I and x held constant) there is a decrease in per capita expenditure of £.3. Since this equation enables us to make the best estimate of the per capita expenditure of any authority we might pay grant in accordance with this formula in order to allow for differences in per capita expenditure in the different authorities, adjusting the constant 2 to such a figure as would result in the total grant available being distributed.

If grant were paid in accordance with the above formula, however, it would mean that we would be paying grant to an authority whose expenditure was higher because inter alia the incomes in the area were higher and this is precisely what we do not want to do. Since / -

Since we are attempting to equalise incomes (or that part of personal incomes devoted to local authority expenditure) we wish to neutralise the effect of different incomes on expenditure. If we reverse the sign of the co-efficient of I, this will have the desired effect since we will be giving the grant the same rate of change with respect to incomes as the expenditure rate of change with respect to incomes but these will be operating in opposite directions.

Our formula therefore becomes -

$$S_i = C + .1x - .3y - .2I \quad \ldots\ldots\ldots\ldots \quad (7)$$

where the value of C is determined by the total amount of grant to be distributed.

It remains for me to relate the above formula to one of those already provided. It was said that one of the objects of this plan was that it should be free from the substitution effects present in the first concept of equalisation (the equalisation of potential) and it is therefore to be expected that any similarity it will have to previous plans provided will be to the second concept of equalisation (an equalisation of fiscal capacity to provide a centrally set level of performance). For purposes of exposition it will be simpler if we assume that the aggregate grant to be distributed is nil.

The / -

$$\sum_i (p_i S_i) = 0$$

$$\therefore \sum_i \left\{ p_i C + \sum .1 p_i x - .3 p_i y - .2 p_i I \right\} = 0$$

$$\therefore \sum_i (p_i C) + \sum_i (.1 p_i x) - \sum_i (.3 p_i y) - \sum_i (.2 p_i I) = 0$$

$$\therefore C \sum_i p_i + .1 \sum_i (p_i x) - .3 \sum_i (p_i y) - .2 \sum_i (p_i I) = 0$$

$$\therefore C = \frac{-.1 \sum_i (p_i x)}{\sum_i p_i} + \frac{.3 \sum_i (p_i y)}{\sum_i p_i} + \frac{.2 \sum_i (p_i I)}{\sum_i p_i}$$

By definition

$$\bar{x} = \frac{\sum_i (x p_i)}{\sum_i p_i} \qquad \text{(see page 7)}$$

similarly for $\bar{y}$ and $\bar{I}$

$$\therefore C = -.1\bar{x} + .3\bar{y} + .2\bar{I}$$

Substituting for C in formula (7) we obtain -

$$S_i = -.1\bar{x} + .3\bar{y} + .2\bar{I} + .1x - .3y - .2I$$

$$= .1(x - \bar{x}) - .3(y - \bar{y}) + .2(\bar{I} - I)$$

It will now be apparent that formula (7) is similar to formula (6) The important difference is that in formula (7) the measure of need is the factor associated with differences in per capita expenditures instead of an arbitrary measure determined by the central authority and the co-efficient applied to the measure of need is the rate of change of expenditure with respect to the independent factor instead of the "minimum outlay" per unit of need. Similarly instead of the per capita tax being equalised formula (7) would equalise per capita incomes.[1]

1. In Musgrave's plans this would be synonymous with the per capita tax base since he defines the tax base as private income in the state.

An attempt was therefore made to see if it were possible to express the relationship between the per capita expenditures of local authorities in Scotland and the main independent factors associated with these differences in per capita expenditure. The results of this investigation are given in Ch.VIII.

Formulae have now been provided for achieving equalisation according to the different concepts of equalisation. In future chapters we shall study the attempts which have been made to achieve equalisation in this country and translate these attempts into terms of the foregoing formulae thereby throwing some light on nature of the different approaches to equalisation.

CHAPTER II.

LOCAL AUTHORITIES AND THE NATURE OF THEIR LOCAL TAX BASE.

1. Introduction.

Before we can study the attempts to achieve equalisation within the local government system it is necessary first to describe the framework of local government in England and Scotland and to examine the nature of the tax base of local authorities. The constitution and functions of local authorities have changed considerably over the years since the end of the last century and although the historical survey of equalisation will begin at the turn of the century it is proposed to deal only with the framework of local government as it exists to-day in so far as this is necessary to a clear understanding of the operation of the Exchequer Equalisation Grant and the General Grant in both countries.

2. Framework of Local Government.

In England the main local authorities consist of county councils, county borough councils, non-county borough councils and urban and rural district councils. The area over which a county council exercises control does not include any county boroughs situated within the geographical county, county boroughs being completely autonomous for local government purposes. The expenditure of a county council falls into two main classes, viz.: expenses for general county purposes and expenses for special county purposes. The expenditure to be treated as expenses for special county purposes depends on whether or not some of the borough or district councils in the county are autonomous for a service, which in the remainder of the county, is provided by the county council.

Although / -

Although several local authorities may exercise local government functions in a particular area, only one authority has the right to levy rates in the area. Thus, in a non-county borough, services may be provided by the county council, the borough council, and possibly a joint board. Of these only the borough council has power to levy rates; the other authorities obtain their requirements by issuing precepts. Rates are levied by the borough council sufficient to produce the sums required by the precepting authorities as well as the amount necessary to meet their own expenditure.

The rating authorities are county borough, borough, urban district and rural district councils. County Councils are not rating authorities. They raise money to meet their expenditure by issuing precepts on the borough and district councils in the county. County precepts are levied on the rating authorities in the county on the "poundage principle", ie., the precept requires the rating authority to levy, as a part of the general rates, a specified rate in the £.

In Scotland local authorities consist of county councils, large burghs, small burghs and district councils. The counties of cities (Edinburgh, Glasgow, Dundee and Aberdeen) are similar to the county boroughs being autonomous for local government purposes. The large burghs are similar to the non-county boroughs in England. They provide all services except Education, Valuation and in certain cases Police which are administered by the County Council throughout the area of the whole county. The small burghs are similar to the urban district councils. The area of the county outwith the large and small burghs is called the landward area of the county. The nearest approach to it in England is the area of the rural district councils. The difference is however that in Scotland there is no separate authority for the landward area, the County Council being responsible / -

responsible for the administration of the purely landward services. Thus as compared with its English counterpart a County Council in Scotland operates in a dual capacity. In the provision of general county services it acts like an English County Council and in relation to the landward services it performs the functions of a rural district council.

The county Council precepts or requisitions (the word used in Scotland) the Burghs for their share of the general county expenditure. The term general county expenditure is not entirely synonymous with that of General County Expenses in England. Where there are large burghs in the County then the expenditure on Education, Valuation and (where applicable) Police would be the equivalent of General County Expenses since expenditure for these purposes is incurred by the Councy Council for the whole county and is chargeable to the large burghs, small burghs and landward areas. The remainder of the General County Services in such a case, i.e. those services other than Education, Valuation and Police would be equivalent to Special County Expenses since the large burghs are autonomous for these services. This expenditure is met by the small burghs and the landward areas. In a county which had no large burghs but only small burghs the general county expenditure would be equivalent to general county expenses in England.

The basis of requisitioning as provided by the Local Government (Scotland) Act 1947 was the rateable value of the various authorities for the preceding year. This of course was roughly analogous to precepting on the basis of rate poundage as in England except that no allowance was automatically made for losses on collection. This basis was altered

to / -

to the Standard or Actual Rateable Value whichever is higher by the Local Government Financial Provisions (Scotland) Act 1954.

As in England there is only one rating authority in each area. Counties of cities levy a rate in their area to meet their expenditure. Large and small burghs levy rates to meet their own expenditure plus their share of the county requisition. The county Council acting in its capacity of "rural district council" levies a county rate in the landward area to meet the expenditure on landward services plus the share of general county expenditure.

District Councils are elected for parts of the landward area. They perform only minor functions and are similar to parish councils in England. They raise the money necessary to meet their net expenditure by requisitioning the county council who levy a district council rate within the area of the district council sufficient to meet the requisitions.

Special districts are areas in the landward area of the county which are formed for the purposes of providing such services as lighting, sewerage, scavenging. Special District rates are levied by the County Council for the different services in each of these areas.

3. <u>The Rating System</u>. / -

3. The Rating System.

The only independent source of local taxation in the United Kingdom is derived from rates levied on the annual value of property and payable by the occupiers of the property. The tax base of local authorities is, therefore, rateable value. The current position in both Scotland and England is that the valuation of property is based on assessed values rather than on the actual rent being paid.

A frequent criticism of the rating system is that unlike the national income tax it is not related to "ability to pay"[1]. It falls somewhat arbitrarily upon a certain class of the community, viz., occupiers, and within that class it tends to be regressive. Although neither arbitrariness nor regressiveness are necessarily objections to a tax it is for consideration as to whether it is possible to devise successfully an equalisation scheme to cope with a tax which has these characteristics. While under present conditions it is recognised that the amounts payable in rates are not related to individuals' incomes the original intention of the rating system appears to have been to operate as a proportional local income tax.

The / -

1. Royal Commission on Local Taxation, 1901. - Cmd.638 , Vol. XXIV, p.13.

The origins of the Scottish Rating system are to be found in an Act passed by the Scots Parliament in 1579 which made the provision for the poor of the parish a legal obligation.[1] Hitherto the provision for the poor had been made almost wholly by means of charitable contributions, e.g., via the Church authorities. This act provided for the funds for poor relief being obtained by means of an assessment to be raised from "the whole inhabitants within the parish, according to the estimation of their substance, without exception of persons".

Difficulties in the application of this statute arose and in 1692 and 1693 the Privy Council issued Proclamations indicating the method of assessment in landward parishes and burgh parishes respectively. The first of these proclamations directed that in landward parishes the assessment was to be made one half upon the heritors, i.e., the owners of property, and the other half upon the householders of the parish. The second proclamation commanded the Magistrates in burghs to raise the necessary funds for the poor in accordance with established usage in such a way "as may be effectual to reach all the inhabitants".

So far as landward parishes were concerned the heritors were assessed for one half of the assessment in respect of their lands and heritages within the parish whether they resided there or not. In the apportionment of the assessment between them, sometimes the valued or estimated rent was taken and sometimes the real rent. For the other half of the assessment the inhabitants were assessed according to their means and substance. In estimating means and substance there does not appear / -

1. A history of the Rating System in Scotland is contained in the Final Report of the Royal Commission on Local Taxation (Scotland), Cmd 1067, (1902). See also Report of the Departmental Committee on Local Taxation in Scotland, Cmd 1674 (1922).

appear to have been any uniform system; in some cases the rent of the subjects occupied was taken as the measure of their means and substance; in other cases an estimate was made of all property belonging to them other than land in respect of which the proprietor was liable as a heritor. In estimating the means and substance assessors might include stocks, shares, mortgages, ships, stock-in-trade and other items of personal property. Wages and salaries were also included, but incomes of small amount were frequently exempted. In the burghal parishes the method of assessment varied in different parishes.

It is evident, therefore, that the underlying idea was to arrive at an estimate of each individual's income and wealth which might form a measure of his "ability to pay". In the case of an owner of property obviously the best estimate was the income or rent which might be derived from his property while in the case of occupiers the alternative method of directly estimating their income or wealth was resorted to. This variety of method of assessment continued for many years and even in 1844 the Poor Law Commission contended that this variety in the methods for raising poor law assessments had considerable advantages, and reported that they were not prepared to recommend any alteration. The Poor Law Amendment Act of 1845, which followed upon the report of this commission accordingly sanctioned the continuance of these different methods of assessment.

In course of time - particularly as a result of the industrial / -

industrial revolution - the inconvenience of assessing upon means and substance became intolerable. No machinery had been provided for ascertaining the incomes of the inhabitants, and the growing volume of personal property in stocks, shares, etc., combined with the increasing mobility of the population, rendered the task more difficult year by year. The system was, in consequence, gradually abandoned although it did not cease to exist until 1880. The parish in which the system continued until 1880 was Greenock which since 1845 had been assessing on means and substance.

It is thus seen that "means and substance" of the ratepayer were an important consideration in the Scottish Rating system in the earlier part of the 19th century and continued to form the basis in some places as late as 1880. In this respect the Scottish Rating system differed from the English system where a method akin to the estimation of "means and substance" does not appear to have survived as long. The continuation of the Scottish practice of rating both owners and occupiers up until 1956[1] is a relic of the attempt to strike at the incomes of all residents within the local authority area.

In England the original statute of 1601 provided for every inhabitant and occupier being liable to be charged and although the liability of the inhabitant to be rated in respect of personal property was early established, the difficulty of ascertaining the value of personal property made it an almost universal practice not to rate personal / -

1. Valuation and Rating (Scotland) Act, 1956.

personal property at all or at most only such as consisted of stock-in-trade[1]. Nevertheless, in 1796 an attorney was rated for his professional fees, and it was stated to have been the practice for more than sixty years to rate such fees but the Court quashed the rate[2]. In 1840 the Poor Rate Exemption Act exempted inhabitants as such from liability to rates and occupation of property became the criterion for liability to charge. It is seen, therefore, that expediency and administrative convenience rather than considerations of principle have resulted in rates becoming as they are to-day regressive.

The importance of the foregoing history in relation to this study lies in the fact that it indicates that initially the object of the rating system was to provide a proportional system of local taxation and that eventually the measure of the income of the ratepayer became the rateable value of the property occupied. If the valuation of the property occupied is a reliable indicator of the income of the ratepayer then it is a comparatively simple matter to devise equalisation schemes in accordance with the formulae provided in Chapter I and it would appear to be largely on this assumption that schemes of equalisation in this country have been devised. Discussion of the extent to which rateable value is a measure of income is however reserved until Chapter IX.

1. Ryde on Rating , Butterworth & Company, 4th Edition, 1920.
2. "R v. Startifant" , 7 T.R.60.

4. Valuation of Houses.

Before completing this discussion of the Rating system it is necessary to mention briefly the different methods of valuing dwelling houses which obtained in England and Scotland. The history of the valuation of houses in England has already been adequately dealt with elsewhere[1]. It suffices, therefore, to deal only with the salient features of the system. The Parochial Assessments Act, 1836, defined, for England, the standard by which the value of properties should be determined, viz., the rent at which the property might reasonably be expected to let from year to year, free of all usual tenants' rates and taxes and deducting therefrom the probable average annual cost of the repairs, insurance and other expenses, if any, necessary to maintain them in a state to command such rent. While the 1836 Act prescribed a standard of value for assessing property it did not provide for the necessary machinery to secure the uniformity which had been prescribed. At the time of the Act there existed a serious degree of undervaluation throughout the country, some parishes not having been revalued for over 100 years. If local authorities were completely independent of one another undervaluation, provided it was uniform throughout the whole area, would not present a problem. It is because inter-authority financial adjustments are frequently made on the basis of the valuations of their areas that it is desirable that uniformity of valuation should obtain throughout all authorities. A local authority by assessing property values below the full / -

1. J.R. and Mrs. Ursula Hicks, The Problem of Valuation for Rating, National Institute of Economic and Social Research, 1944.

The Rating of Dwellings - History and General Survey, I.M.T.A. Research Study 1958.

full value may frequently shift part of the tax burden on to residents in other areas[1]. The two-tier system of local government in this country makes the opportunities for such tax shifting even greater in that the expenditure of the higher tiered authority is assessed on the lower tiered authorities on the basis of their valuations. This inequality in valuations continued until finally in 1948[2] provision was made for the necessary machinery to effect uniformity of valuation by transferring responsibility for valuation from the rating authorities to the central government. The Act provided that for purposes of ascertaining values, dwelling houses would fall into two main divisions, (a) post 1918 houses and (b) other houses. The justification for the distinction between post-1918 and other houses arose from the Government's conclusion that the rental evidence for post-1918 houses was inadequate and as an alternative it was considered expedient to formulate a system of valuation based on hypothetical costs. As regards all other houses, sufficient rental evidence was assumed to be available but it was decided to relate the assessment to the level of rents prevailing as at 31st August 1939. The first valuation lists under the 1948 Act were to operate as from 1st April 1952. This system in fact was never put into effect and a change of Government in October 1951 brought about a reconsideration of the whole basis.

The Valuation for Rating Act, 1953, provided for the assessment of all dwelling houses being made on 1939 rental values. The date for the new valuation lists originally proposed for 1952 was extended / -

1. See James M. Buchanan, The Public Finances, p.454, Richard D. Irwin, Inc., 1960.

2. The Local Government Act, 1948.

extended until 1956. The next revaluation originally scheduled for 1961 was postponed until 1963 at which date valuations are to be based on current rental levels.

In the case of Scotland, Section VI of the Lands Valuation (Scotland) Act of 1854 provided that the annual value of lands and heritages "shall be taken to be the rent at which, one year with another, such lands and heritages might in their actual state be reasonably expected to let from year to year" and required the assessor "where such lands and heritages are bona fide let for a yearly rent conditioned as the fair annual value" to take that rent as the annual value of the property. If a house was not let the assessor estimated the rent which a hypothetical tenant might pay by comparing the property with similar houses which were let[1]. In addition in Scotland the valuation roll was prepared annually and valuations being based on rents passing were thus kept more up to date than in England. Consequently valuations in Scotland were on a higher level than those in England.

Where the tax on property is charged on owners it acts as a disincentive to the provision of houses by private speculators. Since rates in Scotland were payable partly by occupiers and partly by owners the different records of achievement of housebuilders north and south of the Border were frequently attributed to the Scottish method of charging owners with part of the rates. A Committee was appointed in 1943 to investigate "The Effect of the Existing System of Rating on the Provision of / -

1. See The Scottish Rating System - the Sorn Committee Report, Cmd. 6595, 1945.

of Houses and the question of limiting the amount payable in respect of Owners' Rates". While the Committee considered that by their terms of reference they were restricted in their recommendations to one particular remedy - the limitation of the maximum amount payable by way of owners' rates - nevertheless they included in their Report an expression of opinion that a complete abolition of owners' rates and the adoption of the English system of rating occupiers only would provide the best solution to the deterrent to private enterprise building for letting[1].

The Valuation and Rating (Scotland) Act, 1956, provided for the abolition of owners' rates as from 1956/57. At the same time it introduced a new basis of valuation for houses based on the hypothetical rent which a tenant might reasonably be expected to pay - similar to the English system - the first valuation roll under the new method to be effective from 1961/62. This date was intended to coincide with the English revaluation on current rentals but the latter had subsequently to be postponed until 1963. Thereafter revaluations were to be made quinquennially but in the interim period from 1956 to 1961 valuations were frozen at 1956 values. The Act did not transfer responsibility for valuation in Scotland to the central authority.

5. Conclusion.

This concludes our brief survey of the tax base of local authorities and we are now in a position to study the attempts which have been made to achieve equalisation within the framework of the rating system. / -

1. Op. cit.

system. It is appreciated that nothing has been said about the various methods used to value properties other than houses, such as the profits basis and the contractor's principle, etc. The whole history of valuation is a vastly complicated one but to pursue it further here would deflect us from the main purpose of the study. The important principle which emerges, however, is that the rental basis of valuing property which was originally introduced as a method of estimating the income of property owners and as such could reasonably be regarded as a criterion of their income from property has become a standard for assessing the liability to charge of occupiers. It is obvious that as a criterion of the income of the occupiers the proposition would scarcely bear examination but in my opinion the historical association between the value of the property and the owner's income has contributed to the vaguely felt view that in some measure the rental value of property occupied is at least a rough measure of the occupier's income. It should be made clear that it is not suggested that the value of property occupied should necessarily be related to the income of the resident. As has been said many taxes fall arbitrarily on the incomes of citizens and this does not disqualify their use. What is doubted, however, is whether when the tax imposed is not related to an individual's income it is possible to devise a scheme within such a framework so as to achieve any particularly meaningful concept of equalisation.

CHAPTER III.

HISTORY OF EQUALISATION.

1. Minority Report of Royal Commission on Local Taxation (1901).

Attempts at equalisation are to be found in Scotland at a much earlier date than in England. This was no doubt due to the fact that the differences in the per capita tax bases of the various authorities in Scotland showed a much wider variation than those in England and also because of the smallness of some of the administrative units in Scotland. The grant made in 1880-90 in relief of local taxation in the Highlands was based in part on rateable value[1].

The first serious discussion of equalisation is to be found in this minority report of the Royal Commission on Local Taxation. The terms of reference of the Commission were "to inquire into the present system under which taxation is raised for local purposes and report whether all kinds of real and personal property contribute equitably to such taxation; and if not, what alterations in the law are desirable to secure that result". The Commission took evidence from a formidable array of eminent economists - Sidgwick, Marshall, Bastable, and Cannan. But one looks in vain for any contribution on the subject of equalisation grants from these distinguished political economists, their sole contribution appearing to relate to the suggestion that the proceeds of the inhabited house tax should be transferred to local authorities. It was left to a layman, Lord Balfour of Burleigh to make what must surely / -

1. Minority Report of Royal Commission on Local Taxation, Cmd.836-1901, (Vol.XXIV), page 75.

surely stand even by present day standards as a notable contribution to the theory of equalisation grants.

What seems to have impressed Lord Balfour and others was the widely differing tax rates in the various areas[1] and the solution was sought in providing a scheme which would reduce the disparity in these. On the question of how Exchequer contributions should be distributed among authorities, Balfour thought that the main points to be considered were equity, economy and efficiency in administration. Since it is obvious that imperial taxation (Balfour was no doubt thinking of income tax) can be and is raised more in accordance with ability than local taxation it follows that the greater the share of the cost of national services which is borne by the State, the more will this principle characterise the distribution of the entire burden amongst the contributors. On the other hand, the interests of economy and efficiency demand that the local authorities be left with sufficient of this expenditure to meet from their own revenues. The total grant should therefore be about one-half of the total local authority expenditure on national services, but the proportion should vary with different services. This proposal would ensure that, at all events, one-half of the funds would be raised with more regard to ability than if obtained by means of rates.

What Lord Balfour appears to have overlooked, however, is that the fact that 50% of local authority expenditure may be met out of national taxation does / -

1. See Royal Commission on Local Taxation - Scotland (1902), Vol.XXXIX, p.44. "Opinion of Mr. W. Penney, General Superintendent of Poor, as to desirability and possibility of equalising the Poor Rate":- "Another point which has long caused anxiety is the unequal pressure of the Poor Rate assessment. The miserably poor parish of Walls in Shetland has to pay nearly 12/- in the £ as a Poor rate while many much wealthier parishes escape with less than half of the number of pence, with the inevitable result that the able-bodied men are driven from it to work in less heavily taxed districts only returning when health and strength alike fail. I hope it may yet be found possible to impose an equal Poor Rate on all parishes; the poorer would be greatly relieved, and the wealthier would not feel it. It ought not to be 'beyond the wit of man' so to regulate the expenditure in each parish, and by each Parish Council, as to prevent the anticipated prodigality which is, I understand, at present the chief objection to the scheme".

does not necessarily improve the position vis a vis tax burden and "ability to pay" unless the scheme for the distribution of this grant can be made on a basis which has regard to the "abilities" of those who pay local taxes.

Lord Balfour said:-

"The suggestion which I put forward is that "block grants" should be given for each service taken as a whole, and that in the distribution some attempt should be made to equalise the burden remaining to be charged upon the various localities.

With this object in view the conditions to be observed would appear to be the varying circumstances of the different districts as regards, first, ability to raise local funds, and secondly, necessity for expenditure upon the services assisted. Having established criteria of these two conditions the grants should be distributed in such a way that most would be given to those districts which have the lowest ability and whose expenditure is necessarily high, and less to those with the greatest ability and less necessity for expenditure.

It has often been said in and out of Parliament that population is the best basis for the distribution of a Government grant, i.e. that each locality should receive a given sum per inhabitant. Population is, without doubt, a very valuable test (though not by itself a completely adequate test).....in as much as it makes no allowance for the comparative ability of different districts to bear the burden.

Now / -

> Now the ability of any district to bear the burden can best be measured by the value of the property subject to rates. I do not assert that this test is absolutely accurate as regards the ability of the individuals concerned, but it is by far the best measure of the ability of the district, i.e., of the local resources available to meet the burden".[1]

Where the writer might take issue with Lord Balfour is on the extent to which one can draw a meaningful distinction between the ability or incomes of the inhabitants of an area and the resources of the district as a whole. This attempt to regard an authority and its resources as something distinct from the persons whom the authority represents runs through much of the literature on the subject of equalisation grants in this country. This line of approach is particularly evident in official government papers on local finance throughout the past sixty years. When such a distinction has been made so frequently by those whose opinions command respect by reason of their knowledge of public finance it is necessary that this proposition be subjected to careful scrutiny before it is rejected out of hand. Discussion on the extent to which the resources of an authority may be distinguished from those of the residents in the area is reserved, how ever, until Ch.IX.

Lord Balfour accepted that, for the purposes of the scheme suggested in his paper it would be impossible to accept the valuation made by the local valuation authorities. It was on the assumption that the Commission's recommendations for solving uniformity of valuation made in the First Report would / -

1. The italics are mine.

would be implemented that he based his suggestions.

An example of how his suggested scheme would operate may be seen from the proposed grant for police expenditure in Scotland. The grant was to be distributed by giving to each authority:-

(i) The difference between the minimum expenditure for which it was found that the service could be efficiently performed (1/4d. per inhabitant) and the produce of a standard rate of $1\frac{1}{2}$d. in the £ on the rateable value;

(ii) A further sum equal to one-half of the expenditure incurred in excess of the minimum.

The first part of this subsidy may be expressed in mathematical symbols as follows:-

$$S_i = C + m + t_s (\bar{B} - B_i)$$

where the value of C. will be determined by the total amount of grant to be distributed.

It is seen that this is similar to formula (5) - an equalisation of fiscal capacity to provide a standard of service according to a centrally set level of performance:-

$$S_i = C + m (N_i - \bar{N}) + t_s (\bar{B} - B_i) \quad \ldots \quad \ldots \quad (5)$$

The second part of the subsidy may be expressed thus:-

$$S_i = \tfrac{1}{2} (A_i - m)$$

Thus / -

Thus the formula for the full subsidy is:-

$$S_i = C + m + t_s (\bar{B} - B_i) + \tfrac{1}{2} (A_i - m) \quad \ldots \quad \ldots \quad (8)$$

Whereas formula (5) does not contain any term which is a function of the individual authority's expenditure, formula (8) (Lord Balfour's) contains one term which is a function of the expenditure. Formula (8) would seem to lie somewhere between formula (3) (equalisation of fiscal potential in relation to needs) and formula (5) (equalisation of fiscal capacity to provide a centrally set level of performance).

The proposals for England were broadly that minimum expenditures per unit of need should be determined for each of the services concerned and formulae prepared for the various services on the lines of the foregoing illustration. Lord Balfour had an intimate knowledge of lo al circumstances in Scotland and he was aware that the smallness of some of the local units and the widely varying conditions in which they had to operate made it impossible to prescribe minimum standard expenditures which would be suitable for application to all authorities - a situation which still prevails to-day in Scotland. He, therefore, produced a modified set of proposals for services other than police. This scheme involved the use of a complicated scale of percentages to be applied to relevant expenditure, these percentages being graded inversely in proportion to the rateable value per head of population of the authorities. The majority of the Royal Commission found themselves unable to accept these proposals.[1] / -

proposals[1].

2. The Kempe Committee.

The next important reference to equalisation is to be found in the Kempe Committee Report. This Committee was set up in 1912 "to inquire into the changes which have taken place in the relations between Imperial and Local Taxation since the Report of the Royal Commission on Local Taxation in 1901; to examine the several proposals made in the Reports of that Commission, and to make recommendations on the subject for the consideration of His Majesty's Government, with a view to the introduction of legislation at an early date".[2] One obtains the feeling in reading this report that the Committee would gladly have evaded the difficult problem of equalisation had it not been for the fact that Lloyd George wrote to the Chairman specifically asking that attention should be given to the subject.[2] They saw the problem principally in terms of the wealthier citizens moving out of / -

1. Op. cit. p.32

> "In this connection we may mention that we have considered the relative merits of such a scheme of Poor Law grants as we have recommended above in which we have selected certain items of Poor Law expenditure in respect of which we think that Government grants may properly be given, and a scheme of block grants to be given to Boards of Guardians, and based, not on selected items of expenditure, but on calculations made from the rateable values, population, and expenditure in each Union. We do not see how the latter scheme could be worked in connection with the Metropolitan Common Poor Fund, or in such a manner as to encourage and reward good Law administration. On the contrary, we fear that it would in many cases give the greatest relief to Boards of Guardians who have been most remiss in the discharge of their duties relating to the provision of proper accommodation... And at the same time we cannot but think that the number of these paupers in any district is a better test of the "necessity" and "ability" of the district to bear its local burdens, in other words of its relative poverty or well being as compared with other districts, than any complicated system of calculations based on rateable value, population and expenditure especially when regard is had to the fact that the R.V. or Poor Law expenditure of a district are both materially affected by the good or bad administration of the laws relating to valuation and Poor Relief."

2. H. of C. (1914) Session Vol. 40-41, Cmnd. 7315.

out of the towns into the neighbouring outlying districts. Consequently they felt that the solution to the problem lay in expanding the administrative units so as to encompass both the wealthy and the poor. The Local Government (Adjustments) Act (1913) had just been passed to facilitate this process. As Mrs. Hicks has pointed out, even if this had been successful, it would still have left the problem of depressed areas which might cover a whole range of authorities.[1]

The Committee also recommended that a block grant for elementary education be distributed on a scheme framed on the principles advocated in the Minority Report of Lord Balfour. They suggested that the standard expenditure should be based on the number of children in average attendance instead of on the total population, as being more closely related to the actual conditions of the service, the standard expenditure to be fixed at 60/- per child, the standard rate at 7d. and the proportion of excess expenditure to be contributed by the Exchequer at 2/5ths. The grant was therefore to be -

£3 per child plus 2/5ths of the total net expenditure less the produce of a 7d. rate.

This grant may be expressed as follows:-

$$S_i = c + m(N_i - \bar{N}) + t_s(\bar{B} - B_i) + {}^2/_5 A_i \quad \ldots \quad \ldots \quad (9)$$

Where N_i = the ratio of scholars to population.

The value of C will be determined by the total grant payable by the Central Government.

It / -

1. J.R. and Ursula Hicks, op. cit., p.25.

It will be noted that the first three parts of this formula constitute formula (5) (an equalisation of fiscal capacity to provide a centrally set level of performance) while the last part is a function of the individual authority's expenditure. The Education grant based on this formula was introduced in 1917 and continued in operation until 1945. It was resuscitated in 1948 by the Labour Government with appropriate adjustments in the "necessary minimum outlay", the "standard rate" and the percentage to be applied to authorities' expenditures.

3. General Exchequer Contribution.

In 1929 the Conservative Government, as part of a scheme of re-organisation of local government generally, introduced the General Exchequer Contribution - the "block" grant. This grant has been amply discussed elsewhere[1] and it is not intended to deal with it at any length here. It is proposed merely to draw attention to its equalisation features and to its particular concept of equalisation.

The aggregate grant was calculated for "fixed grant periods" and the formula for distribution was based upon the following factors:-

(a) The estimated population.
(b) A weighting for children under 5 years of age.
(c) A weighting for areas of low rateable value per head.
(d) A weighting for high incidence of unemployment.
(e) For counties only, a weighting for sparsity as measured by the population per mile of road.

If / -

1. D.N. Chester, Central and Local Government, Macmillan, 1951

If one had the available data it would be possible to show that this grant may be expressed in terms of formula (5) (an equalisation of fiscal capacity to provide a centrally set level of performance). In principle the grant is similar to the "General Grant" which was introduced as from 1959/60 by another Conservative Government. Since the data is available for the General Grant it is possible to demonstrate its relationship to formula (5) and this is shown in Ch.V.

Researches by J.R. and Mrs. Hicks.

Although there had been discussion of equalisation there had as yet been no empirical research on which to base conclusions about equalisation grants or the important question as to what extent the rateable value of an authority is a sound measure of its resources but in 1944 J.R. and Mrs. Hicks published three important books as a result of their investigations into the problems of local taxation in this country. A study of these publications is important since they are frequently referred to in discussion of the Exchequer Equalisation Grant. An attempt is therefore made to summarise the results of the "Hick's" investigations and their conclusions using wherever possible their own words.

I must confess at the outset to a little difficulty at times in following the logical steps in the development of their argument. There is, too, a certain lack of preciseness in the terminology used. For example, reference is made to wealthy or poor towns without producing evidence to show that the "wealthy" towns are inhabited by persons of high income. On occasion the term "wealth" seems to be used as meaning "with a high R.V. per head of population". Again, too, the word "rates" is sometimes used to indicate "rate poundages" and at other times to mean the amount of the rate payments. In the Incidence of Local Rates in Great Britain[1] / -

Great Britain[1] we find p.27:-

> "This point is of great importance for the understanding of the true rate position of London. Because of the popular pre-occupation with poundages (a pre-occupation from which councillors are not exempt), London is not considered to be especially highly rated..... Rate poundages are also a misleading indication of relative rate incidence in other parts of the country.....
>
> We have here two examples of ways in which rate poundages can be a very misleading indication of relative rate incidence. It is only when we can measure actual rate payments against local incomes that the true relative significance of local taxation becomes apparent. It is extremely desirable that more information of this nature should be available to local authorities, so that they may be able to measure the true money burden they are fastening on their poorer citizens when an expansion of local services is agreed to".

Yet in Standards of Local Expenditure[2] we are told that the object of the exercise is to find an answer to the question "Why does the level of rates vary from place to place?". By this we see Hicks to mean rate poundages.

It is for this reason that it has been found difficult to give a condensation of their works in such a way as to present a logical sequence leading to their conclusions regarding a proposed equalisation grant. It is hoped that this very condensed "precis" of their works is a fair one, but it is suggested that

a / -

1. J.R. & Ursula Hicks, The Incidence of Local Rates in Great Britain, National Institute of Economic & Social Research, Cambridge University Press, 1945.
2. J.R. & Ursula Hicks, Standards of Local Expenditure, National Institute of Economic & Social Research, Cambridge University Press, 1943.

a study of the works themselves will do more justice to Hicks than any abridged version given here.

The first of these works is entitled Standards of Local Expenditure - a problem of the inequality of incomes[1], the second The Problem of Valuation for Rating[2] and the third The Incidence of Rates in Great Britain[3]. Taking the last book first I find it to be the least convincing of the three works - at least in its relevance to our particular problem, i.e., the problem of the different fiscal capacities of the various local authorities in Scotland. This may be due to the fact that the investigation had a two-fold object. It was part of an investigation into the burden of Taxation in Britain being complementary to the work of G.F. Shirras and L. Rostas whose work The Burden of British Taxation studied the proportions of the incomes of different classes which were paid in taxation in national taxes and in rates other than rates on houses. At the same time it sought to serve as the basis for the other investigation being carried out by J.R. and Mrs. Hicks into the problem of local taxation. One is left with the feeling that the work has more relevance to the first of these objects than to the second.

In analysing the "income incidence" the measure of the burden of rates which is adopted is rate payments as a percentage of net income. This seems a reasonable basis for discussion. The analysis is based on the returns from households for the purposes of the Ministry of Labour 1937-38 Cost of Living enquiry (except for Scotland). For the purposes of the exercise, Hicks breaks down Great Britain into some nine regions, one of which comprises the whole of Scotland. Tables are then produced to show that for each of these regions rates form a very low percentage of income - the average for Great Britain being not / -

1. Op. cit.
2. Op. cit.
3. Op. cit.
4. G.F. Shirras & L. Rostas, The Burden of British Taxation, Cambridge University Press, 1942.

not more than 3.3% for incomes up to £250 per annum.

I have two criticisms of this approach. Firstly, the averages are based on regions too wide to be appropriate for comparisons of smaller local units. It is felt that to draw any conclusion regarding relative burdens between the ratepayer of one local authority and another in Scotland based on an average for the whole of Scotland is misleading. My second criticism is that the range of income - at least for Scotland - is too wide and that a lower limit than £250 should have been fixed for investigation.[1] These criticisms aside, however, let us accept for the moment the premise that rates payments as a percentage of working class incomes do not vary widely throughout the country.

Let us now proceed to Standards of Local Expenditure. This opens by stating that the object of the enquiry is to find an answer to the question "Why does the level of rates vary from place to place?". The question is asked "Why do high rates present such a serious problem?". Since derating was introduced in 1929 the burden on manufacturing industry is not serious. The bulk of rate receipts come from house property. It is pointed out that in the third publication The Incidence of Local Rates evidence has been produced to show that rates as a tax on working class incomes do not account for a high percentage of their income on average. The real trouble with rates, then, is not the total burden nor the inequality between classes for that is quite moderate. The heart of the problem is the / -

1. In 1939 the minimum standard wage of males in Glasgow was £2.17. 0d. per week (see Corporation of City of Glasgow "Facts and Figures"). The standard wage of county roadmen was approximately £2. 8. 0d. per week.

the disparity between the levels of rates (presumably rate poundages)[1] in different areas.

If the analysis in Incidence of Rates is correct, viz., that rate payments as a percentage of income do not differ substantially throughout the country either between classes or areas it is difficult to see how wide differences in rate poundages present a problem. Differences in rate poundages can only give rise to difficulties if they represent different burdens of rates between individuals in one authority and another.[2]

Hicks then proceeds to say that differences in rates may be due to one of two causes:-

(1) Expenditure per head or population, or

(2) R.V. per head of population.

High rates may be due either to high expenditure per head of population or to low R.V. per head of population. The standard of expenditure therefore is to be expenditure per head of population not per £ of R.V. The per capita expenditure of each borough on each of the main lines of expenditure is analysed.

To analyse the expenditure of the County Boroughs a system of grouping is adopted. This system of grouping endeavours to pay some attention to:-

(1) Geography

(2) Relative wealth or poverty as measured by R.V. per head of population or 1d. rate product per head.

First / -

1. The comment in italics is mine.

2. Although I recognise the psychological difficulty of high rate poundages.

First of all therefore there is listed in order of ld. rate products per head the County Boroughs:-

Eastbourne

Bournemouth

.....etc.

The County Boroughs are then re-sorted into the following groups:-

1st Group - At the top of the list come the seaside resorts. By reference to another Table (Table III) it is seen that all of these excepting Southport, are distinguished for their high expenditure per head of population. These are therefore taken as the first group, setting aside Southport, whose inclusion would probably make the average of the group less significant.

2nd Group - Next in order come Oxford and Exeter, with Canterbury, Bath and Chester close upon their heels. Thus a second group - that of the cathedral towns - begins to form. These are relatively [1] wealthy towns, but (as appears from Table III) these are not, with the exception of Chester, high spenders.

3rd and 4th Group - The 3rd Group is that of "Poor Spenders" (i.e. those with a low R.V. per head <u>but</u> who spend more than £5 per head of population. The 4th Group is that of "Poor Stinters" (i.e. those with a low R.V. or ld. per head rate but who spend less than £5 per head of population).

5th Group / -

1. We note this constant substitution of wealthy for high R.V. per head of population without having accurately established that the two are synonymous.

5th Group - Nearly all the towns which appeared in Table III as having an expenditure per head greater than £6.5. 0d. were either seaside resorts (already grouped) or towns which only achieved that level of expenditure by levying a rate poundage decidedly above the average. These towns therefore, other than the seaside resorts and Merthyr, Bootle and Chester (excluded for special reasons), form the 5th Group and are known as "Big Spenders".

6th Group - This comprises a group of industrial towns, which are not among the very poor towns but have a level of expenditure comparable with that of the Poor Stinters. These form a group known as the "Middling Stinters".

Table No.1

Table V - Group Averages - Rates and Block Grants (1938)

	Average Rate Poundage	Average of per capita receipts (in pence) From Rates	From Block Grant	From Rates plus Block Grant
Seaside Resorts	9/5	1439	141	1580
Big Spenders	17/8	1348	282	1630
Cathedral Towns	10/6	1040	179	1219
Middling Stinters	11/4	854	232	1086
Poor Spenders	16/9	925	352	1277
Poor Stinters	14/6	802	294	1096
* National Average (all county boroughs)	14/-	1078	254	1332

* This "national average" has been calculated by averaging the per capita receipts (or poundages) of the 83 county boroughs. It is thus an unweighted average.

Hicks / -

Hicks states that it is already apparent from this table that the high rates of the poor spenders are due to their attempt to maintain a standard of expenditure not too far short of the national average; as a result of their poverty they cannot do even this without involving themselves in abnormally high poundages. Even the poor stinters who take the alternative route of limiting their expenditure, are unable to maintain their low standards except by imposing poundages above the average. The high rates of the big spenders, on the other hand, are due to their abnormally high expenditure.[1]

The conclusion which Hicks comes to is that the main reason for disparities in rates (rate poundages[2]) is disparities in wealth (rateable value per head of population[2]). At any level of wealth one town may be more inclined to spend than another - one may be a "spender", another a "stinter"; but this remains less important (in the majority of cases) than the difference which is due to differences in wealth.

It might be pointed out, however, that while it might be true that the main reason for disparities in rate poundages was disparities in rateable value (not necessarily synonymous with wealth[2]) this would not necessarily mean that the rate burdens were widely different in so far as high rates applied to low valuations (or undervalued property) might be equivalent to low rates applied to high valuations.

Hicks therefore recommends that the block grant be used as a really effective equaliser. It would, for example, be possible without any additional cost to the central government to take a basic level of rates / -

1. It is felt that there is an element of "begging the question" here in that Hicks has assumed that low rateable value per head is synonymous with poverty.

2. The comments in italics are mine, not those of Hicks.

rates (say 12/6d. in the £) and to use the block grant to make the income of all authorities which - at the basic rate - fell below a certain standard amount (per head of population) up to that amount. For county boroughs the standard amount could be at least as high as the 1938 expenditure of the poor spenders (on all services but domiciliary relief which it was recommended should be taken over by the central Government) and enough would still be left over to make some allowance for special needs, such as would no doubt be present in the other cases.

In this way the poor spenders would be able to attain the level of expenditure they have actually attained but without any exceptional burden on the rates; while those towns whose standards are deplorably low would be able to attain a modestly respectable standard without any undue strain. There would be nothing to prevent any town from spending more than the standard amount, if it chose to bear the cost of the excess - only the cost of the excess.

Hicks states that this suggested Equalisation Grant would require to wait until there had been a revaluation of properties throughout the country. In his second book he had analysed the different levels of valuation in different areas and made recommendations for valuation to be transferred to the Inland Revenue so as to achieve uniformity of valuation throughout the country. With the inequalities in valuation which exist at present, a uniform level of rates (such as the basic 12/6d.) would in fact impose considerably heavier burdens upon some towns than upon others. In order for a distribution of block grant, genuinely in accordance with the poverty or wealth of the area, to be practically feasible, valuations would have to be made more uniform.

Here / -

Here again it is difficult to reconcile this with his findings in Standards of Local Expenditure. In Standards of Local Expenditure we found Hicks assuming that high R.V. per head was synonymous with wealth and low R.V. per head synonymous with poverty and it was on the basis of their R.V. per head of population that he categorised them into "wealthy" or "poor". Now we find from this admission regarding the lack of uniformity of valuation that on achieving uniformity of valuation there will be a change in the categories of "wealthy" and "poor".

It is felt that there is a failure to appreciate that ultimately the resources of an authority do not consist of its rateable value but that in the final analysis they are related to the incomes of the ratepayers. An increase in the rateable value of an authority does not necessarily mean an increase in resources unless it represents a corresponding increase in the incomes of the ratepayers. Hicks would seem to be primarily concerned with the local authority rather than with the ratepayer. I do not say that R.V. per head of population is necessarily an unreliable indicator of the incomes in the different areas. I merely say that it has not been established by these researches. Indeed, Hicks's findings in one book seem to contradict his conclusions in the other.

Like Lord Balfour, Hicks seems to have seen the problem primarily in terms of differing tax rates (rate poundages) and his suggested grant is designed to reduce the disparities in rate poundages. Although Hicks obviously has appreciated that widely different rate poundages / -

poundages may not necessarily represent widely differing rate burdens[1] he fails to follow this through in the other part of his analysis.[2]

It will be noted that the suggested subsidy was to be a standard rate applied to the deficiency in the authority's own tax base from the standard or "datum" tax base. The formula is thus:-

$$S_i = t_s (\bar{B} - B_i) \text{ provided that } B_i < \bar{B}$$

This is similar to the third part of formula (5). It is an equalisation of fiscal capacity on the assumption that there are no differing needs. It is not proposed to take anything away from above standard base authorities. Thus in this case the sum of the $(\bar{B} - B_i)$s will not equal zero since B_i must always be less than $\bar{B}$. It appears that this concept of equalisation was alien to the philosophy of the Labour Government which came to power in the immediate post-war period for when the Exchequer Equalisation Grant was eventually introduced, although it was, like Hicks's, scheme, based on rateable value, it embodied a different approach to equalisation.

1. J.R. and Ursula Hicks, The Incidence of Local Rates, op.cit., p.27.
2. do Standards of Local Expenditure, op.cit.

CHAPTER IV.

THE EXCHEQUER EQUALISATION GRANT.

1. Introduction.

The 1914/18 war had seen the introduction in 1917 of an attempt at an equalisation of the Education service in a form similar to formula (9). The immediate post-war period of the 1939/45 war saw the introduction of the Exchequer Equalisation Grant by the Labour Government which came to power on the first election after the war. When one considers much of the other legislation which emanated from this socialist government such as that which resulted in the introduction of the welfare state, it is not surprising that they should be interested in achieving equalisation in local finance and that the concept of equalisation aimed at should be an equalisation of potential in relation to needs. The introduction of the Exchequer Equalisation Grant coincided with the transfer of certain local authority functions to the central government, e.g., responsibility for National Assistance payments, the hospital service and the gas and electricity undertakings.

2. The Basic Formula (England and Wales).

Under the Local Government Act, 1948, Exchequer Equalisation Grant[1] was payable to County Councils and County Borough Councils whose R.V. per head of weighted population fell below the national average. Weighted population was defined as actual population plus the number of children under 15 plus in an administrative county whose population per mile / -

1. Henceforth the abbreviation E.E.G. will be used to indicate Exchequer Equalisation Grant.

mile of road was less than 70, one third of the additional population needed to bring the population per mile of road up to 70.

The calculation of E.E.G. is basically a simple one; where the R.V. per head of (weighted) population of an authority is less than the average R.V. per head of (weighted) population of all authorities in England and Wales (excluding London) then the Exchequer steps in and pays rates on that additional rateable value (known as the credited Rateable Value) necessary to bring the authority's R.V. per head up to the national average. Thus each authority with actual rateable value per head of population below the national average then has rateable resources equal to the average, made up of actual rateable value plus credited rateable value.

It is now necessary to make certain definitions. "Standard Rateable Value" (SRV) of an authority means the product of (1) the weighted population of the authority and (2) the average rateable value per head of weighted population in England and Wales.

"Credited Rateable Value" means the excess (if any) of the Standard Rateable value over actual rateable value (CRV).

"Relevant Local Expenditure" means the net expenditure which would fall to be met from the rates if no exchequer equalisation grant were payable. In the case of a county it includes the expenditure of the county council and of all the other local authorities in the county.

The "Relevant fraction" is the fraction of which the numerator is the relevant local expenditure and the denominator is the sum of / -

of (1) the Credited Rateable Value and (2) the product of a rate of £1 in the £. (£R)[1] .

Exchequer Equalisation Grant is then derived from the following formula:-

$$E.E.G. = RF \times CRV \text{ or } \frac{RLE}{CRV + £R} \times CRV$$

In the absence of E.E.G. the rate which an authority would require to levy would be arrived at by dividing its relevant local expenditure by its rateable value $\frac{RLE}{RV}$. (This would give us a rate expressed in terms of a £ instead of as so many pence in the £). For an authority in receipt of E.E.G. the rate required to be levied would be arrived at as follows:- $\frac{RLE}{SRV}$, since it has an effective rateable value i.e. SRV made up of its actual rateable value plus its credited rateable value. It will be seen therefore that the "relevant fraction" $(\frac{RLE}{SRV})$ represents broadly the rate per £ needed to meet expenditure of an authority which is in receipt of E.E.G. It was said that the Exchequer pays rates on that additional rateable value necessary to bring the actual rateable value per head up to the national average. Applying the above rates to the additional rateable value therefore we get:-

$$E.E.G. = \frac{RLE}{SRV} \times CRV$$

Disregarding for the moment the complication of the weighting factor, it is seen that the above formula is formula (1), viz.,

$$S_i = (\bar{B} - B_i)\ t_i$$

- an equalisation of fiscal potential. The subsidy in formula (1) is a function of the individual authority's tax rate (which in turn is related to its expenditure) and the difference between the average <u>per capita</u> tax base and its own tax base. In applying the formula to counties it is seen that the Government were treating the upper tier authority as though it were in fact the administrative unit for the whole / -

1. The effect of using the product of £1 in the £ instead of actual rateable value is to allow losses on collection of rates and exempt subjects.

<u>Note</u> also:- Contributions in lieu of Rates on Crown property count as rates for this purpose (S.145(7))

whole area including the lower tiered authorities within the county.

3. Capitation Payments (England and Wales).

Capitation payments were paid direct by the Ministry to the County districts. The capitation rate for non-county boroughs and urban districts was arrived at by dividing one half of the total of E.E.G. paid to counties outside London by the unweighted population of those counties. The capitation rate for rural districts was one half of that for the other districts.

The capitation grants were deducted from the E.E.G.paid to the Counties. They were required to be paid by the County whether it received E.E.G. or not, the sums required being raised through the County precept.

The principles adopted in connection with the Capitation payments were practically identical with those adopted for the Block Grant under the 1929 Act. There was one important difference however; if the County Council drew no E.E.G. or if it was insufficient to meet the sums due to the districts then it had to pay the amounts or the shortage over to the Ministry.

Thus within a county the capitation payments to the district councils were in effect financed by the district councils themselves by deduction from their E.E.G. or by direct precept on the basis of rateable value where necessary.

If / -

If we let

c = capitation rate (for sake of simplicity let us assume the same rate for non-county boroughs and rural district councils)

t_s = a standard rate

B_i = per capita tax base of i th authority within the county

$\bar{B}$ = average (weighted) per capita tax base within the county

then it is obvious, since the total capitation payments must be provided for from the tax bases of the authorities within the county, that

$$c = t_s \bar{B}$$

Allowing for the fact that any district contributes out of its own tax base to the per capita subsidy, the net subsidy (or tax) will be

$$S_i = c - t_s B_i$$

substituting for c

$$S_i = t_s \bar{B} - t_s B_i$$

$$= t_s (\bar{B} - B_i)$$

But this is our second concept of equalisation (an equalisation of fiscal capacity to provide a centrally set level of expenditure) and thus while suitable for inclusion in the 1929 Block Grant / -

Grant of the Conservative Government, it was at variance with the principles of the Exchequer Equalisation Grant, a circumstance to which attention was subsequently drawn by the study group on The Effects of the Local Government Act, 1948, and other Recent Legislation on the Finances of Local Authorities.[1]

4. Contributions in lieu of rates on Electricity and Transport Hereditaments.

Part V of the Local Government Act, 1948 provided that electricity and transport undertakings should not be liable to rates. Instead the Central Electricity Authority and the British Transport Commission were required to pay lump sums to the Ministry described as "payments for the benefit of local authorities". These sums were allocated among local authorities in proportion to their rateable value.[2] County boroughs received the whole allocation; in the case of county districts $\frac{2}{3}$ went to the county council and $\frac{1}{3}$ to the district council.

These sums were treated as deductions from local expenditure to arrive at relevant local expenditure thus reducing the total amount of E.E.G. which would otherwise be payable.

5. The / -

1. The Effects of the Local Government Act, 1948 and other recent Legislation on the finances of Local Authorities. Accounting Research Vol.III, No.3, July, 1952.

2. Sec.100 of Local Government Act, 1948.

5. The Basic Formula (Scotland).

In Scotland E.E.G. was made payable to County Councils, Counties of Cities and large burghs whose R.V. per head fell below the necessary standard. Instead of the standard being average R.V. per head of weighted population it was the sum taken as the average R.V. per head of weighted population in England and Wales plus 25%

The reason for this addition to the English figure was that it was recognised that the different systems of valuation inthe two countries resulted in different levels of valuation; whereas in England and Wales the principle of valuation was that rates were paid on the reasonable rent that the tenant would pay if he were liable for all of the rates on the property, for its maintenance and for its insurance, in Scotland rates were paid on the rent actually passing, on the assumption that the tenant was responsible only for the occupier's share of the rates and the landlord was responsible for the maintenance and insurance of the property. At that time Scottish rates consisted of both owner's and occupier's rates. Thus Scottish rateable values were higher for two reasons; firstly they included a sum in respect of the landlord's outlays on maintenance and insurance and secondly since landlords in Scotland paid owner's rates they accordingly charged higher rents to enable them to do so. When the Bill for the Local Government Act, 1948 was being considered there was considerable agitation on the part of local authorities in Scotland for a greater addition than 25% to be made to the English standard in order to give the standard rateable value to be used in Scotland. The figure of 25% however was adopted partly because it had been used in the past and also because a revaluation in England was imminent and it was not considered advisable to change the / -

the percentage pending this revaluation.

The weighting to population was similar to the English one being for counties of cities and large burghs, the addition of the number of children under 15 years of age and for counties the same addition with an addition for sparsity equal to $\frac{1}{3}$ of the additional population necessary to bring the population of the county up to 70 per mile of road.

For counties E.E.G. was calculated on the basis that the counties included the small burghs i.e. the relevant local expenditure included the expenditure of the county council on general county purposes (excluding any amount allocated to a large burgh), the expenditure on landward services, the expenditure of the small burghs themselves, the district council expenditure and the expenditure in respect of special districts. The Grants were to be applied towards expenditure (except the part requisitioned from large burghs for education and police) on all functions exercised throughout the whole county including the small burghs.

6. Capitation Payments (Scotland).

Capitation rates for small burghs and landward areas were arrived at by dividing one-half of the total of all the counties' Exchequer Equalisation Grants by the combined unweighted population of all the small burghs and landward areas. The resultant rate, multiplied by the unweighted population of a small burgh, gave the capitation grant to that burgh. The landward rate was $\frac{2}{3}$ of the burgh rate.

As / _

As in England, if the County Council drew no E.E.G., or if it was insufficient to meet the sums due to the small burghs and landward area, then the County Council had to meet the cost or the shortage, spreading the payment over the landward area and the small burghs.

7. Comparison between English and Scottish E.E.G. Formula.

It will be noted that the original Grant provisions relating to Scotland and England were similar, the main differences being (1) that in Scotland instead of using average R.V. per head of population there was used the English average plus 25%, and (2) that the landward capitation rate was $\frac{2}{3}$ the burgh rate as against the rural district council rate which was $\frac{1}{2}$ the urban and non-county borough rate.

8. Report of the Committee appointed to Investigate the Operation of the E.E.G. in England and Wales 1953.[1]

(a) Introduction.

Section 14 of the Local Government Act, 1948 provided for investigations into the working of the E.E.G. in the year in which the first new valuation lists under Part III of the Act come into force and thereafter every 5th year. In the event the revaluation scheduled to be completed by April 1953 had to be postponed until April 1956. The Government decided however to hold an investigation in 1953 although a further investigation would be necessary in the year in which the revaluation / -

1. Report of the Committee appointed to Investigate the Operation of the E.E.G. in England and Wales, H.M. Stationery Office, 1953.

revaluation took effect. A committee was therefore set up under the chairmanship of Mr. F.L. Edwards, C.B., O.B.E., Under Secretary for Finance and Accountant General at the Ministry of Housing and Local Government.

In their investigations the Committee had the help of certain studies into the E.E.G. which had been carried out since the introduction of the grant. These were Education Rates and the Education and Equalisation Grants[1] by J.B. Woodham; the five reports of a study group on The Effects of the Local Government Act, 1948 and other Recent Legislation on the Finances of Local Authorities,[2] the first four of these under the Chairmanship of Leo T. Little and the last under the Chairmanship of J.B. Woodham. Tribute was also paid to the work of D.N. Chester, C.B.E. in various writings and in particular his Central and Local Government[3] and also to the published works of J.R. and Ursula Hicks.

(b) Capitation Payments.

It had been pointed out in the Fourth Report of the Working Party under the Chairmanship of Leo T. Little that the payment to the county council of that part of the Equalisation Grant which was payable in respect of the expenditure of the county districts and its consequent distribution on the basis of rateable value was in conflict with the general principle of the Grant, because it had the effect of aiding most those county districts which spend the least and have the largest / -

1. J.B. Woodham, Education Rates and the Education and Equalisation Grants, I.M.T.A., Research Study, 1953.
2. Op.cit. The five reports are published in Accounting Research, Aug.1949, Jan. 1950, July 1951, July 1952, Jan. 1953.
3. Op.cit.

largest rateable value per head. Their main conclusions were:-

(a) In those counties which receive little or no Equalisation Grant the capitation payments exert an influence in favour of equalisation of resources but this influence is not great enough.

(b) The effect of the Equalisation Grant is in the opposite direction, i.e. it accentuates the inequalities of resources and in those counties which receive Equalisation Grant at a high rate this effect outweighs the equalising effect of the capitation payments.

(c) The capitation system favours the urban districts in most counties, the Equalisation Grant system the rural districts.

The Committee finally recommended that the best solution was the abolition of the capitation payments and the introduction of direct Grants to county councils on the lines proposed by the Woodham Working Party in their 5th Report[1] viz:-

(i) The payment of Equalisation Grant to county councils based as at present on the rateable value per head of weighted population of the whole county, but calculated on the expenditure of the county council for general county purposes only.

(ii) The payment of Equalisation Grant to county district councils whose rateable value per head of unweighted / -

1. Op.cit.

unweighted population is below the national average, calculated, in a similar way to the county council Grant, on the expenditure of the district council, which would be defined as including all payments made by the district council under precept with the exception of the precept for general county purposes.

In reaching their conclusion that unweighted population should be used in calculating the Grants to county districts consideration was given as to whether there should be a weighting for sparsity and also whether any differentiation was desirable between urban and rural districts such as there was under the existing capitation system. On the one hand urban districts have themselves to meet the cost of urban unclassified roads and in addition to bear through the county precepts a part of the cost of rural unclassified roads. On the other hand the cost of services in rural districts is, in general, far more liable to be inflated on account of sparsity. It was considered that those two factors might be expected broadly to balance one another.

(c) Limitation on Relevant Local Expenditure.

The Committee also recommended that some limits be placed on the expenditure ranking for Grant although they had found no evidence of the Grant having induced extravagance on the part of local authorities receiving it.

(d) Weighting Factors / -

(d) Weighting Factors.

They also considered the question of weighting which had been criticised by Woodham in his Education Rates and the Exchequer Equalisation Grant. They decided that the weighting for children should be retained so long as the education grant remained in its existing form. As regards sparsity they suggested the replacement of the existing weighting by one based on the addition to weighted population of 1/10th of the number required to bring the population per mile of road up to 170 together with 1/5th of the number required to bring the population per mile of road up to 60.

No change however was made in the Grant provisions until the Local Government Act, 1958 which also introduced the General Grant - the Block Grant in place of the former percentage grants. Unlike the Scottish Grant the basis of which was altered in 1954 and in 1956 the English E.E.G. remained as originally enacted for a period of eleven years.

9. Report of Investigating Committee into Operation of Grant in Scotland (1st Investigating Committee 1953)[1].

(a) Level of Standard Rateable Value in Scotland and England.

At the same time as the English investigation a Committee sat for Scotland. The first question to which the Committee directed themselves was that of the level of standard rateable value in Scotland as compared with that for England and Wales. It will be remembered that Scottish authorities had contended that the addition of 25% to the English average was too low - a figure of 60% had been suggested. After investigations / -

1. Report of the Committee appointed to Investigate the Operation of the Exchequer Equalisation Grants in Scotland, H.M. Stationery Office 1953.

investigations the Committee recommended that since no precise arithmetical measure could be found of the difference between the levels of rateable value in Scotland and England and Wales the additional assistance for Scottish authorities should be determined on some other basis. They suggested that the total amount of E.E.G. distributable in any year to local authorities in Scotland should be determined on the basis of 11/80ths (the Goschen equivalent) of the equalisation grant payable in that year to local authorities in England and Wales. The Goschen formula had for long been used to determine the education grant for Scotland.

(b) Weighting Factors.

The Committee also dealt with the question of weighting factors and considered several alternatives including weightings for unemployment for increasing and decreasing populations, and for excessive cost of housing. The only new weighting adopted however was one for rapidly increasing population. This is an extra weighting where the growth of population over 5 years exceeds 5% of the population in the first of these years - the weighting being twice the excess. In a county where the weighting applies, small burghs obtain a share of the benefit, because (under Sec.4 (3)(c)(ii) of the Local Government Financial Provisions (Scotland) Act, 1954) part of the weighting is allocated to small burghs in proportion to unweighted population.

(c) Relation between E.E.G. and Local Authority Housing / -

(c) Relation between E.E.G. and Local Authority Housing.

The relation between Equalisation Grant and Local Authority Housing was another matter for consideration. Rents of local authority houses are fixed by the authorities themselves. Since the rent which passed determined the Rateable Value it followed that a local authority by increasing its rents would increase its Rateable Value and consequently decrease its Credited Rateable Value (i.e. that national rateable value on which the Exchequer pays rates). There was therefore a reluctance on the part of local authorities to raise their rents since by doing so they were losing E.E.G.

The Committee therefore recommended that in calculating equalisation grant the rateable value to be taken in respect of each local authority house should be the average rental for the preceding year of all houses erected by local authorities in Scotland under the Housing Acts.

It may be noted that the adjustment of the actual rateable value by substituting for the rateable value of local authority houses a notional figure based on the number of local authority houses multiplied by the average rental of local authority houses in Scotland is merely an expedient. It is completely contrary to the whole basis on which the E.E.G. rests. The E.E.G. recognises that rental levels vary in different parts of the country whereas the adjustment for local authority houses assumes that rental levels should be the same throughout the whole of Scotland.

(d) Capitation Payments (Scotland).

It / -

(d) Capitation Payments (Scotland).

It had been recognised, as in England, that the system of capitation payments was at variance with the principles on which the equalisation grant rests. Areas of high valuation contributed little or nothing to the county grant as a whole, but received capitation payments, together with a share (proportionate to rateable valuation) of the balance of the county equalisation grant where it exceeded the total of the capitation grants. Areas of low valuations contributed largely to the county grant as a whole, and, in some cases, their capitation payments and shares of the county grant were substantially less than their contribution.

The Committee therefore recommended the discontinuance of Capitation Payments. In considering the alternative arrangements for the payment of E.E.G. on the discontinuance of the Capitation Payments the Committee had before them statements showing the effect of calculating E.E.G. for seven selected counties on the basis of separate grant calculations for the landward area and the small burghs within the county, with general county expenditure allocated (a) on the existing basis of rateable value, and (b) on standard rateable value or actual rateable value whichever is the greater.

On an examination of the first statement i.e. allocating on the basis of R.V. it was noted that as compared with the existing basis, the rates in Cupar in the County of Fife would rise from 9/7d. to 13/1d., while the rates in St. Monance in the same county would fall from 12/- to 9/8d. This was to be expected since the change involved taking away / -

away grant from Cupar which had a high rateable value per head and the payment of a larger grant to St. Monance, whose rateable value per head was lower than the standard figure. It was also noted that while the range of local rates in the County of Fife on the existing basis was 5/- - from 9/5d. to 14/5d., the range if the grant were calculated separately for each area, would be 8/3d. - from 9/8d. to 17/11d. The reason for this greater disparsity was considered and it was realised that if direct grants were to be paid, the rates levied, since they would be determined by standard rateable value, should reflect the expenditure per head of the various local authorities. What was making for the greater dispersion was the fact that the allocation of county general expenditure was being made on the basis of actual rateable value though the rate poundages were calculated in effect, by reference to standard rateable value.

When statement (b) was studied - allocation on basis of standard rateable value or actual rateable value whichever is the greater - it was seen that the local rate in Cupar would be 10/11d. and the rate in St. Monance 11/3d. The effect of this arrangement would be to promote the proportionality of local rates within the county, since they would be based, in effect on standard rateable value in the case of the under-average authorities and on actual rateable value in the case of over-average authorities. The rate levied in the landward area and the small burghs for county general purposes would be the same throughout the county, subject to slight variations because the allocation is made on the previous year's standard rateable values or actual rateable values as the case may be and the rate is levied on the current year's figures.

It was recommended therefore (a) that the existing system of capitation / -

capitation payments should be discontinued (b) that in future equalisation grant should be calculated separately for the landward area and each small burgh and that the county requisitions should be allocated on standard rateable value or actual rateable value whichever is higher (c) that the weighting of population for children and sparsity should be allocated as between the landward area and the small burghs in a county in proportion to their respective population.

It may be pointed out however that the allocation of general county expenditure on the basis of S.R.V. or actual R.V. does not lead to proportionality of rate poundages if one considers the effect of the recommendation which the Committee also made regarding the adjustment in respect of local authority houses. It is true that the allocation on S.R.V. or R.V. (whichever higher) would have led to proportionality of rate poundages had there been no adjustment in respect of the rentals of local authority houses. The result of giving effect to the Committee's recommendation regarding local authority houses however is that the effective rateable value becomes Actual Rateable Value plus Credited Rateable Value instead of Standard Rateable Value. If there are two small burghs in a county - both receivers of Exchequer Equalisation Grant - one of which has fixed the rents of its local authority houses below the average for Scotland and the other with council house rents above the average then the allocation of general county expenditure on the basis of S.R.V. or actual whichever is higher will result in the burgh with the low rents policy having to levy a higher rate than the burgh with a high rents policy in order to meet its share of the general county expenditure.

It will be noted that the method recommended by the Investigating Committee for Scotland for the calculation of E.E.G. payable to the small burghs differs from that recommended by the English Committee (see page 72). The Scottish Committee considered the possibility of adopting the English scheme in which case Grant would have been paid -

(i) to town councils of large burghs on the existing basis (as amended)

(ii) to county councils on general county expenditure (excluding that part of it allocated to large burghs), and

(iii) to the town councils of small burghs, and to county councils in respect of the landward area, on other expenditure.

Under such a system it will be seen that it would not be necessary to allocate on the basis of S.R.V. in order to achieve the principle of proportionality.

If the English scheme had been adopted it would have meant calculating the grant to small burghs and the landward area on the basis of unweighted population. It was thought however that in Scotland - having regard to the burden of expenditure on unclassified roads and other services in the landward area - it would be right to use weighted population. In that case further consideration would require to be given to the sparsity factor to be used in calculating the weighted population of the landward area. The Committee therefore decided to recommend the method already indicated. / -

indicated.

(e) Limitation on Relevant Expenditure.

Although no evidence had been produced of excessive spending as a result of the Grant the Scottish Committee considered the desirability of imposing some limit on the expenditure ranking for Grant in view of the fact that the English Committee had recommended some form of limitation.

In Scotland however since the total amount of E.E.G.was 11/80ths of the amount payable in England and Wales there was no Exchequer interest in limiting the relevant expenditure in Scotland. Since the local authority representatives did not wish any scheme of limitation in their own interests it was decided not to recommend any limitation although it was agreed that if the Scottish Grant became payable on any other basis a scheme of limitation would require to be considered.

(f) Education Grant.

The total amount of the Education Grant in Scotland was 11/80ths of that paid in England (The Goschen formula). The Education Grant to individual authorities in Scotland was similar to that in England being 60% of the net relevant expenditure plus £6 per pupil less the product of a rate of 22d. in £ or such rate as was sufficient to exhaust the grant in the Education (Scotland) Fund. This rate in the £ was varied each year in such a way as to distribute the total grant.

It was suggested that logically any rate deduction should be on the effective rateable value i.e. on standard rateable value or rateable / -

rateable value if higher. So long as the total Exchequer Equalisation Grant and the total Education Grant was determined by the Goschen formula a change in the allocation of the Education Grant would not affect the Exchequer's liability and consequently this was a metter primarily for agreement on the part of the local authority representatives. It was therefore agreed that the rate deduction factor should be calculated on the basis of S.R.V. or actual rateable value whichever is higher.

(g) Contributions in lieu of Rates on Electricity and Transport Undertakings.

Under Part V of the 1948 Act, electricity and railway undertakings had been taken out of the valuation roll and in place of the rates formerly paid the B.T.C. the B.E.A. and the North of Scotland Hydro-Electric Board each contributed annually sums based on the rates paid in 1947-48, the amount of the contribution being adjusted each year in accordance with a formula laid down in the Act and Regulations. These contributions were payable to the local authorities in proportion to their respective rateable values.

The Committee considered that having regard to the recommendations made for the allocation of county expenditure and for the making of deductions under the education grant formula on the basis of standard rateable value if higher than actual rateable value, this principle should be extended also to payments under Part V of the Act.

(h) District Councils.

Representations had been made by the District Councils Association / -

Association that although the District Council expenditure formed part of the Counties' relevant expenditure and thus earned Grant for the county no part of the Grant was paid to the District Council in aid of its expenditure. It was felt that it was unfair that ratepayers in the area of a district council which incurs substantial expenditure should benefit no more by way of grant than those in a district in which expenditure is negligible. It was therefore recommended that payments should be made by the County Council to the District Councils out of the Grant payable to the County such payments being based on the proportion of the county grant which the district council expenditure included in the relevant local expenditure bore to the relevant expenditure on which the grant was based.

Parish councils in England are in a similar position to that which obtained in the district councils prior to the above recommendation being given effect to by the Local Government Financial Provisions (Scotland) Act, 1954. The effect of this recommendation is that the grant to the district councils looks only at the expenditure side. It disregards the resources aspect. The result is that payment of grant can be made to a district council whose R.V. per head of weighted population is above the standard and who in terms of the Equalisation Grant principle would consequently not be eligible for grant.

The recommendations of the Investigating Committee were given effect to by the Local Government (Financial Provisions) (Scotland) Act, 1954.

10. Report of Committee appointed to investigate the Operation of the Exchequer Equalisation Grants in Scotland (Second Investigation) 1955.[1] /-

Following / -

1. H.M. Stationery Office, 1955.

10. Report of Committee appointed to investigate the Operation of the Exchequer Equalisation Grants in Scotland (Second Investigation 1955)[1].

Following on the Report of the Scottish Valuation and Rating Committee (The "Sorn" Committee) the Secretary of State announced that as regards the equalisation grant, the Government were prepared, in the light of the report, to review the method of determining the grant in consultation with the Associations of local authorities.

The appointment of a Committee was therefore made on 24th June 1955. The Committee made no recommendation for any substantial change in the method of distributing the grant among local authorities. The main subject of report was the question of the adequacy of the 11/80ths formula for determining the total grant for Scotland.

The Sorn Committee had recommended the introduction in Scotland of a system of valuation and rating broadly similar to that which is now in operation in England and Wales. It had proposed that during the interim period, while revaluation on the new basis was being carried out, the existing rateable values should be arithmetically adjusted in a way which the Committee believed would give results not very different from those likely to follow revaluation. The Government did not accept this method of arithmetical adjustment but decided as an alternative that valuations should be frozen during the interim period.

The revaluation in England and Wales, the results of which would not be available until 1956, in so far as it was based on rentals obtaining in 1939 would still not have afforded a basis for comparison even if the Sorn / -

1. H.M. Stationery Office, 1955.

Sorn Committee's proposal to estimate new Scottish values by arithmetical adjustment had been adopted.

It was therefore agreed that for the time being the total of E.E.G. in Scotland must be determined on some interim basis. The interim nature of the alternative method was emphasised. The local authority members urged that, as the results of revaluation in Scotland become apparent, study should begin of the relative levels of value in England and Scotland without waiting until revaluation in Scotland is complete. The interim period is likely to be longer than originally envisaged since the revaluation in England on current values originally intended to be effective from 1961 to coincide with the Scottish revaluation was postponed until 1963.

The effect of determining the total amount of the Grant for Scotland on the basis of 11/80ths of the English Grant was equivalent to calculating the Scottish Grant on the average rateable value per head of weighted population in England and Wales plus 38%. The Sorn Committee's sample calculations provided strong evidence that the present English average would have to be increased by substantially more than 38% to provide a Scottish equivalent. In England and Wales the ratio between credited rateable value and actual rateable could not fall below the proportion for 1948-49 by virtue of the Safeguard in Sec. 3(3) of the Local Government Act, 1948. In Scotland this ratio, although it improved after the introduction of the Goschen formula was still less than in 1948-49. In the opinion of the Committee this appeared to confirm that Scotland was receiving less than her fair share of the Grant.

In their opinion the inadequacy of the 11/80ths basis was also confirmed / -

confirmed by a comparison of the rates and grant borne expenditure, and the rate burden, in the two countries. The relevant local expenditure of England and Wales (ex. London) for 1953/54 was £378,115,696, the Scottish expenditure for the same year was £52,203,401.

The weighted populations were 50,038,135 for England and Wales and 6,495,797 for Scotland. Thus the Scottish relevant expenditure per head of weighted population was £8.04 as against £7.56 for England and Wales.

The residual burden left to be met by rates in the two countries after the payment of exchequer equalisation grant was then related to actual population. The reason given for this was that while the weighting of population reflected the additional cost of local government services by reason of sparsity or large number of children, reference to actual population was considered to provide a closer measure of the burden imposed by rates.

The figures for 1953/54 were:-

	Scotland	England and Wales excluding London
	£m.	£m.
Relevant local expenditure	52.20	378.11
Exchequer Equalisation Grant	8.42	61.20
Rate - borne expenditure	43.78	316.91
Actual Population	5,117,612	40,747,460
Burden for head	£8.55	£7.78

The / -

The Committee said that looked at in this way it might be argued that the existing arrangements, by leaving Scotland with a heavier burden of expenditure per head of weighted population and a heavier burden of rates per head of actual population were unfair.

The question was how could a broad equality between Scotland and England and Wales be brought about? A simple equalisation grant formula would be one which gave Scotland the additional grant which would be required to equalise the Scottish residual rate burden per head of actual population with the rate burden in England and Wales. This would mean however that any expenditure above the English average rate burden would attract an equal amount of grant to Scotland and therefore fall wholly on the Exchequer.

An attempt was made to find a formula which would give Scotland compensation on an appropriate proportional basis for the excess, as compared with England and Wales, in the residual burden per head of actual population left after the payment of grant by the Goschen formula. For this purpose the Committee considered it necessary to re-introduce into the comparison the conception of relevant local expenditure per head of weighted population as a measure of the services provided by local authorities in the two countries. The approach was then as follows: "If the local authority services provided in Scotland were to cost proportionately the same as in England and Wales, (ex. London) (after payment of ad hoc grants) in terms of relevant local expenditure per head of weighted population, what grant might appropriately be paid in order to leave a residual rate burden comparable with that carried by English local authorities."

The / -

The method was illustrated in the Investigating Committee's Report as follows:-

(1) First a "notional relevant local expenditure" for Scotland was derived from the English relevant local expenditure by applying the ratio between Scottish and English weighted population as follows:-

Relevant local expenditure (England & Wales)	£378.11m.
Estimated weighted population (England and Wales)	50,038,135
Weighted population (Scotland)	6,495,797
"Notional relevant local expenditure"(Scotland)	£49.8m.

(2) Secondly a "notional rates burden" was calculated showing what would fall on the rates in Scotland if the true rates were the same per head of actual population as in England and Wales.

	£m.
Total relevant local expenditure (England & Wales)	378.11
Exchequer Equalisation Grant (England & Wales)	61.20
	316.91
Population (England and Wales)	40,747,460
Population (Scotland)	5,117,612
"Notional rates burden" (Scotland)	£39.80m.

(3) The two figures of "notional relevant local expenditure" and "notional rates burden" were then dealt with as follows:-

Notional / -

	£m.
Notional relevant local expenditure (Scotland)	49.08
Notional rates burden (Scotland)	39.80
Exchequer Equalisation Grant calculated on notional relevant local expenditure	9.28

It is seen that if expenditure per head of weighted population were being incurred in Scotland at the same rate as in England and Wales (ex London) the E.E.G. would have to be £9.28m. in order to leave Scotland with the same rate burden per head of actual population in England and Wales. This represents a ratio of grant to notional expenditure (£49.08m.) of 18.91%. If this percentage is then applied to the actual relevant local expenditure (£52.20m.) the result is an actual E.E.G. of £9.87m. compared with an estimated grant in the Goschen formula of £8.42m. This Grant represents the proportion that the Equalisation Grant would bear to relevant local expenditure if Scotland were (so to speak) treated for grant purposes as an average part of England and Wales (ex London).

This then was the scheme recommended by the Committee. It was also suggested that the guarantee of a minimum of 11/80ths of the English Grant should be retained. This recommendation was given effect to by the Valuation and Rating (Scotland) Act, 1956. Under the 6th Schedule as amended by the Local Government Financial Provisions (Scotland) Act, 1958 the total amount of the E.E.G. for Scotland is a proportion of the Relevant Local Expenditure of Scottish authorities, the proportion being that represented by the ratio of the "notional exchequer grant" for Scotland to the "notional relevant local expenditure" for Scotland. The "notional relevant local expenditure" for Scotland is derived / -

derived from the English relevant local expenditure by applying the ratio between Scottish and English weighted population. A "notional rate borne expenditure" for Scotland is derived from the English rate borne expenditure (i.e. English R.L.E. - English E.E.G.) by applying the ratio between Scottish and English unweighted population. The "notional exchequer grant" for Scotland is then arrived at by deducting the "notional rate" borne expenditure for Scotland from the "notional relevant local expenditure" for Scotland. The calculation of the total grant for the purposes of the 3rd Provisional Calculation 1959-60 is shown in Appendix No.2. For this purpose the weighted population is calculated on the same basis for England and Wales and Scotland, ie. the unweighted population plus the number of children under 15 plus in counties $\frac{1}{3}$rd of the additional number necessary to bring the population per mile of road up to 70. In making the calculation for the purposes of the Sixth Schedule the total relevant local expenditure and population etc. are taken for all authorities both grant-receiving and non-grant receiving.

It will be noted that the only Scottish factors entering into the calculation of "Notional Exchequer Grant for Scotland" and "Notional Relevant Local Expenditure for Scotland" are the population and the weighted population of Scotland. Hence the only Scottish factors entering into the calculation of the total Scottish Grant are the population, weighted population and the relevant local expenditure of Scottish authorities. Thus changes in the levels of valuation of Scottish authorities cannot affect the total amount of grant payable to Scotland. They can only affect the distribution of the grant to authorities inter se.

11. The Local Government Act, 1958.

The Local Government Act, 1958 gave effect to the main recommendations of the Edwards Committee of 1953. The Act changed the name of the Grants to the "Rate Deficiency" Grants[1].

The most important change was that the capitation payments were discontinued. Grant is paid to eligible county councils on the expenditure for general county purposes only. Boroughs, district councils and metropolitan boroughs get R.D.G. on their own expenditure and also on payments to the county for special county precepts. County Boroughs continue to receive grant on all their expenditure.

The Research Study Local Expenditure and Exchequer Grants, 1956 had recommended that E.E.G. should be based on ld. rate products instead of rateable value thus making allowances for non-effective rateable value. This was given effect to. The grant for an authority is the proportion of that authority's expenditure represented by the following:-

$$\frac{\text{Standard ld. rate product - actual ld. rate product}}{\text{Standard ld. rate product}}.$$

"Standard penny rate product" is:-

$$\text{ld. rate product for England and Wales} \times \frac{\text{Population of the area}}{\text{Population of England and Wales}}$$

In making the calculation for counties and county boroughs an addition is made to the population of each county with a ratio of population to / -

1. Henceforth the abbreviation R.D.G. is used to indicate Rate Deficiency Grant.

to road mileage of less than 70. The increase is 2/5ths of the additional population needed to bring the county's population up to 70 per mile of road.

If an authority has relevant expenditure of £1,200,000 an actual ld. rate product of £3000, and a standard ld. rate product of £4,000, then its grant is:-

$$1,200,000 \times \frac{£4,000 - £3,000}{£4,000} = £300,000$$

Limitation.

There is a section in the Act which limits the amount of the R.D.G. which can be paid to an authority. The object of the exercise is to find out which authorities are increasing their expenditure most, and to eliminate grant on "excess" expenditure, but there is a concession for those authorities who have spent comparatively little in the past and who need to "catch up" with the others. As this section is somewhat complicated and since there is no corresponding provision relating to the E.E.G. in Scotland it is not proposed to go into further detail regarding the "limitation arrangements".

The 1948 Act provided a guarantee that the total E.E.G would always keep up with the level of local expenditure. This was considered necessary because it was thought that the grant would automatically diminish as and when rateable values became more uniform throughout the country. The 1958 Act does not

continue / -

continue this guarantee for the R.D.G. The intention of the Government is apparently to adjust the total amount of government aid by altering the total of the general grant.

12. Comparison between the English and Scottish Grant.

Having traced the development of the Grant in both countries from the time of its introduction until the present day it may be useful finally to summarise briefly the main points of difference between the two formulae.

In England R.D.G. is now based on rate product instead of rateable value thus making allowance for empty property, losses on collection etc. whereas in Scotland the E.E.G. is still based on rateable value.

For the R.D.G. the standard up to which the actual ld. rate product of an authority is brought is that ld. rate product which it would have if it enjoyed average rate product per head of weighted population. In Scotland the standard rateable value up to which an authority's rateable value is brought is that rateable value arrived at by multiplying the "governing factor" per head of weighted population by the weighted population of the area. The "governing factor" is the figure used by the Secretary of State sufficient to exhaust the total Scottish Grant.

Thus in England the starting off point is the average R.V. or average rate product per head of weighted population and it is this / -

this which determines ultimately the total grants to local authorities. In Scotland it is the other way round; the total grant is first determined and this determines the governing factor which in turn forms the basis of Standard Rateable Value.

This is an important difference. It means that whereas in England each authority's grant is calculated independently of the others, e.g. an increase in the R.D.G. of one authority does not automatically reduce the amount available for the others, in Scotland the E.E.G.s of the authorities are interdependent - a change in one authority's position resulting in a redistribution of grant among the grant receiving authorities. This inter-dependence and variability of the factors makes it exceedingly difficult to trace through the effect of proposed changes in the Grant formula.

For England the only weighting factor in the population is the sparsity one for counties and county boroughs of 2/5ths of the additional population necessary to bring the county's population up to 70 per mile of road. In Scotland in addition to the sparsity weighting for counties which is $\frac{1}{3}$rd of the additional population necessary to bring the population up to 70 per mile of road, the weighting for children under 15 is retained for all authorities. Scottish Counties also receive a weighting for rapidly increasing population.

The adjustment for local authority houses in arriving at the Credited Rateable Value is no longer necessary since the revaluation of 1961/62 in Scotland is based on hypothetical rents instead of on rents actually passing. No similar adjustment was ever necessary for England. / -

England.

In England eligible County Councils receive grant on expenditure for general county purposes only. The net expenditure on general county purposes after deducting R.D.G. is precepted on the poundage basis on the non-county boroughs and district councils within the county. Boroughs and district councils receive R.D.G. on their own expenditure and also on payments to the county for special county precepts but not of course on the general county precept since that is already net after deduction of R.D.G. It will be noted that proportionality is not achieved for special county purposes although it is understood that the amounts involved are small and that there is always Section 7 of the 1958 Act to cover the exceptional case.

In Scotland on the other hand County Councils do not receive grant on expenditure for general county purposes. The County Council in its capacity of "rural district council" receives grant on its landward expenditure plus its share of the county requisition for general county expenditure. Large and small burghs receive their E.E.G. based on their own expenditure plus their share of the county requisition. The allocation of the county requisition is made on the basis of S.R.V. or actual R.V. whichever is higher this being deemed to be the effective rateable value. County Councils must pay out of the E.E.G. received on behalf of the landward area a share to the district councils based on the proportion which the relevant local expenditure of the district councils bears to the total relevant local expenditure of the landward area.

In / -

In Scotland there is no limitation provision similar to that contained in the Local Government Act, 1958. The 1st Investigating Committee considered the desirability of imposing some limit on the expenditure ranking for Grant in view of the fact that the "Edwards" Committee had recommended some form of limitation. At that time since the total amount of the Scottish Grant was 11/80ths of the amount payable in England and Wales there was no exchequer interest in limiting the relevant expenditure in Scotland. This is not so now. As the local authority representatives did not wish any scheme of limitation in their own interests it was decided not to recommend any scheme of limitation. It may be that this question will be raised at the next investigation either by the Central Government or at the instigation of interested authorities.

13. The effect of weightings in the Exchequer Equalisation Grant.

It was said that in addition to equalising rateable values per head of population the Grant also endeavoured to take account of differing needs on the expenditure side. It remains for us to see how this was attempted by the inclusion of weightings in the formula.

Instead of equalising Rateable Values per head of population the grant equalises Rateable Values per head of weighted population. The weightings are (a) the number of children under 15 which is added to population, and (b) the sparsity factor - an addition to the population where the ratio of population to road mileage is below the prescribed standard. / -

standard. Woodham sees the introduction of weightings into the formula as something unsatisfactory[1]. "Consider, on the other hand, the enormous advantage of a formula which equalised rateable resources per head of ordinary population. Given a grant based upon such a formula, then rate poundages would become directly proportionate to expenditure per head of population, not only within the same authority, but equally between two different authorities".

The precise significance of this weighting does not appear to have been fully appreciated by previous investigators[2] of the Exchequer Equalisation Grant, although Woodham comes near to it when he says (p.13) "It (the rateable value credited) is therefore a measure of the deficiency in local rateable resources, compared with the national average, scaled up or down relatively to that of other authorities according as the authority's weightings for children and sparsity are above or below the national averages."

I shall take Woodham's own example in analysing the Rateable Value Credited of the County Borough of Bootle to illustrate the point.

County Borough of Bootle. / -

1. Op.cit. p.15.

2. J.B. Woodham, Op.cit.
Local Expenditure and Exchequer Grants, Op.cit.

County Borough of Bootle.

(1)	Population	64,760	
(2)	Children	19,100	
(3)	Sparsity	Nil.	
(4)	Weighted Population	83,860	
(5)	Rateable Value	£468,319	
(6)	Standard Unweighted R.V. (1) x £7.8394674 (the average R.V. per head of unweighted pop.)[1]		507,684
(7)	Standard Rateable Value (4) x £6.4312510 (the average R.V. per head of weighted pop.) 2		539.325
(8)	Rateable Value Credited (7 - 5)		£ 71,006

Woodham thus breaks down the rateable value credited -

Rateable Value component = (6 - 5) =	£	39,365
Weighting component = (7 - 6) =		31,641
		71,006

The weighting component arises because (a) Bootle's ratio of children to total population .29494 exceeds the national average of .21608, and (b) its sparsity weighting (Nil.) is less than the national average of .00288. Thus the gain of 31,641 can be divided between children weighting and sparsity weighting as follows:- / -

1. Standard unweighted R.V. is the tax base the authority would have if it had average per capita tax base.

2. Standard R.V. is the tax base the authority would have if it had average tax base per head of weighted population.

Actual number of children	19,100		
Standard number of children .21608 x 64,760	13,993		
Gain	5,107	at £6.4312510 (R.V. per head of weighted population)	£ 32,844

Sparsity Weighting

Actual sparsity factor	Nil.		
Standard sparsity factor .00288 x 64,760	187		
Loss	187	at £6.4312510 (R.V. per head of weighted population)	£ 1,203
		Net Gain	31,641

Continuing from where Woodham has left off, it is obvious that in per capita terms the Rateable Value credited is:-

Rateable Value Component.

By dividing the total R.V. Component shown on page 98 by the population of Bootle we see that in per capita terms it is

$$\frac{(6) - (5)}{p} = \frac{507,684 - 468,319}{64,760} = .607859$$

(p = Bootle's population

P = Total population

c = Bootle's children population

C = Total Children population

s = Bootle's sparsity factor

S = Total sparsity factor

WB = Tax base per head of weighted population)

Children Component.

As before total children Component on p. 99 is divided by Bootle's population

$$\left(\frac{c}{p} - \frac{C}{P}\right) \bar{WB} = \frac{5,107}{64,760} \times 6.4312510 = .507171$$

Sparsity Component.

Divide total sparsity component on p.99 by Bootle's population

$$\left(\frac{s}{p} - \frac{S}{P}\right) \bar{WB} = -\frac{187}{64760} \times 6.4312510 = -.018571$$

We may check this back as follows:-

R.V. Component	64,760	x	.607859	=	£ 39,365
Children Component	64,760	x	.507171	=	32,844
Sparsity Component	64,760	x	-.018571	=	- 1,203
Rateable Value Credited					£71, 006

Suppose now that we let

N_i^{l} = the per capita standard of need as measured by the ratio of an authority's number of children/its population $\left(\frac{C_i}{p_i}\right)$

N_i^{ll} = the per capita standard of need as measured by the ratio of an authority's sparsity factor/its population $\left(\frac{S_i}{p_i}\right)$

and that the use of bars indicates weighted averages as on page 7

e.g. / -

$$\text{e.g.} \quad \bar{N}^{1} = \frac{\sum_i (N_i^1 p_i)}{\sum_i p_i}$$

(alternatively stated $\frac{C}{P}$)

We then see that the per capita Rateable Value credited will be -

$$\underset{\text{(R.V. Component)}}{(\bar{B} - B_i)} + \underset{\text{(Children Component)}}{(N_i^1 - \bar{N}^{1}) \overline{WB}} + \underset{\text{(Sparsity Component)}}{(N_i^{11} - \bar{N}^{11}) \overline{WB}}$$

and the per capita Standard Rateable Value will be -

$$\underset{\text{(average tax base)}}{\bar{B}} + \underset{\text{(adjustment to tax base)}}{(N_i^1 - \bar{N}^{1}) \overline{WB}} + (N_i^{11} - \bar{N}^{11}) \overline{WB}$$

It is seen therefore that the formula having provided an authority with average per capita tax base initially then increases or reduces it by a proportion of the average tax base per head of weighted population ($\overline{WB}$) according as its standard of need is above or below the average standard of need.

It would be more meaningful for us however if we could express this adjustment in terms of an adjustment to the tax base $\bar{B}$ instead of the weighted tax base $\overline{WB}$.

$$\text{Now} \quad \overline{WB} = \frac{\sum_i (B_i p_i)}{P + C + S}$$

multiply numerator and denominator by P

$$\text{Therefore} \quad \overline{WB} = \frac{P}{P + C + S} \times \frac{\sum_i (B_i p_i)}{P}$$

By definition

$$\bar{B} = \frac{\sum_i (B_i p_i)}{P}$$

Therefore / -

Therefore $\overline{WB} = \frac{P}{P + C + S} \times \bar{B}$

(For convenience represent the weighted population P + C + S as WP).

Going back to page 101 we see that per capita R.V. Credited $(\bar{B} - B_i) + (N_i^{1} - \bar{N}^{1})\ \overline{WB} + (N_i^{11} - \bar{N}^{11})\ \overline{WB}$ may be expressed as follows:-

$$(\bar{B} - B_i) + (N_i^{1} - \bar{N}^{1}) \times \frac{P}{WP} \times \bar{B} + (N_i^{11} - \bar{N}^{11}) \times \frac{P}{WP} \times \bar{B}$$

and per capita Standard Rateable Value $\bar{B} + (N_i^{1} - \bar{N}^{1})\ \overline{WB} + (N_i^{11} - \bar{N}^{11})\ \overline{WB}$ as

$$\bar{B} + (N_i^{1} - \bar{N}^{1}) \times \frac{P}{WP} \times \bar{B} + (N_i^{11} - \bar{N}^{11}) \times \frac{P}{WP} \times \bar{B}$$

Let us now re-define our standards of need N^{1} and N^{11}. Suppose that instead of making

$$N^{1} = \frac{c_i}{p_i}$$

and

$$N^{11} = \frac{s_i}{p_i}$$

that we had defined them as follows

$$N^{1} = \frac{c_i}{p_i} \times \frac{P}{WP}$$

$$N^{11} = \frac{s_i}{p_i} \times \frac{P}{WP}$$

$$\bar{N}^{1} = \frac{\sum_i (c_i P)}{\sum_i (p_i WP)} = \frac{P \sum_i c_i}{WP \sum_i p_i} = \frac{P}{WP} \times \frac{C}{P}$$

We may now write for per capita Rateable Value Credited

$$(\bar{B} - B_i) + (N_i^{1} - \bar{N}^{1})\ \bar{B} + (N_i^{11} - \bar{N}^{11})\ \bar{B}$$

and for per capita Standard Rateable Value

$\bar{B}$ / -

$$\bar{B} + (N_i^1 - \bar{N}^1)\ \bar{B} + (N_i^{11} - \bar{N}^{11})\ \bar{B}$$

The subsidy formula is then

$$S_i = \frac{A_i}{\bar{B} + (N_i^1 - \bar{N}^1)\ \bar{B} + (N_i^{11} - \bar{N}^{11})\ \bar{B}^{11}} \times (\bar{B} - B_i) + (N_i^1 - \bar{N}^1)\ \bar{B} + (N_i^{11} - \bar{N}^{11})\ \bar{B}$$

$$\text{now } t_i = \frac{A_i}{\bar{B} + (N_i^1 - \bar{N}^1)\ B^1 + (N_i^{11} - \bar{N}^{11})\ \bar{B}}$$

therefore

$$S_i = (\bar{B} - B_i)\ t_i + (N_i^1 - \bar{N}^1)\ \bar{B}t_i + (N_i^{11} - \bar{N}^{11})\ \bar{B}t_i$$

Stated in this form the Exchequer Equalisation Grant is similar to formula (2) $S_i = (\bar{B} - B_i)\ t_i + (N_i - \bar{N})\ \bar{B}t_i$ - an equalisation of fiscal potential in relation to needs.

The Exchequer Equalisation Grant formula therefore endeavours to make allowances for differences in fiscal potential by equalising the per capita tax base and at the same time to make allowances for needs by applying the correction for need to the yield of the equalised tax base. The formula is perfectly logical and consistent both in its equalisation of the resources side and the need or expenditure side in so far as it attempts to put into effect a particular approach to the problem. This is not to say that the measures of need provided for in the Exchequer Equalisation Grant are necessarily the most accurate. But it is hoped that it does show that the inclusion of needs factors or weightings in the Exchequer Equalisation Grant is not objectionable on the grounds of / -

of obscuring the workings of the Grant if we understand the fundamental nature of the Grant. In making recommendations for the dropping of the children weighting from the Exchequer Equalisation Grant and for the substitution therefor of a scholar-ratio compensating factor[1] equal to plus or minus £15 for every scholar more than or less than the authority's standard number, these writers, although they may not have realised it, were expressing a preference for a different concept of equalisation.

1. J.B. Woodham, Op.cit., p.78. See also a similar recommendation Local Expenditure and Exchequer Grants, Op.cit., p.246.

CHAPTER V.

THE GENERAL GRANT.

1. Introduction.

We turn now to the General Grant which also has equalisation features but which has a fundamentally different approach to equalisation from that of the E.E.G. Labour which had held office from the first election after the 1939/45 war and during whose period of office the E.E.G. had been introduced was finally defeated at the polls in 1951 and replaced by a Conservative Government. Early in 1956 the Minister of Housing and Local Government announced that a comprehensive review of local government finance was being undertaken as part of the Government's proposals for local government in England and Wales and in reply to a Question in the House on 8th May 1956 he explained that this review was the most thorough of its kind since 1929. The other proposals of the Government dealt with Areas and status of Local Authorities[1] and the Functions of County Councils and County District Councils[2]. No similar proposals relating to Areas of Local Authorities and the Functions of County Councils etc. were made for Scotland and it was only the review of local government finance therefore which affected Scottish local authorities.

The / -

1. White Paper Cmnd. 9831, July 1956
2. " " " 161, May 1957.

The Government's proposals for Local Government Finance (England and Wales) were published in a White Paper[1] in July 1957 and similar proposals for Scotland were contained in a White Paper on Local Government Finance in Scotland.[2] Prior to the issue of these White Papers the results of two studies into the subject viz. The Report of s Study Group of the Royal Institute of Public Administration on New Sources of Local Revenue[3] and a Research Study set on foot by the Institute of Municipal Treasurers and Accountants on Local Expenditure and Exchequer Grants[4] had been made available to the Government in advance of their publication. The Report of the R.I.P.A. had recommended a local income tax at a low flat rate not exceeding 3d. in the £ and the I.M.T.A. Research Study had come out strongly in favour of percentage grants against a General Grant[5].

2. Government's Proposals for Local Finance.

The Government however indicated that they did not think it practicable to devise a satisfactory new source of local revenue by authorising the collection of a local income tax or other such impost on top of the national system of taxes. Any improvement of the system of local finance in this country could only come from an / -

1. White Paper Cmd. 209, July, 1957
2. " " " 208, July, 1957
3. New Sources of Local Revenue - R.I.P.A., Allen and Unwin, London, 1956.
4. Local Expenditure and Exchequer Grants, Op.cit.
5. " " " " p.282

an improvement of the rating system combined with a radical re-casting of the system of grants.

The E.E.G. accounted for only about 15% of the total of Exchequer Grants, the majority of the other grants being on a percentage basis in respect of specific services (e.g. Education, Health, etc.). The Government indicated that the kind of improvement which they thought desirable was one which would result in a substantially larger part of the grant-in-aid being given in the form of general assistance not tied on a percentage basis to specific services. Although it was stated that the underlying purpose of the proposals was to give local authorities increasedfinancial independence and to encourage local government electors to take a fresh interest in local government affairs[1] there does not appear to be anything in the proposals to justify such a statement and the real reason for the change would seem to be in this Government's different political approach to the Grant system. As has been seen a previous Conservative Government had in 1929 introduced a "Block Grant" in place of a number of percentage grants for specific services. At that time they had excluded from the "Block Grant" the major grant for the Education Service but on this occasion it was proposed to bring Education within the scope of the General Grant. The Government did not propose to abandon entirely the Exchequer Equalisation Grant which was allowed to continue in a slightly modified form.

3. Re-rating of Industry.

In 1929 industry and freight-transport had been derated to the / -

1. Mr. Brooke, Minister of Housing and Local Government - Hansard Vol.564, p.1079.

the extent of 75% of their net annual value. With a view to strengthening the rating system it was now proposed to re-rate these subjects to 50% of N.A.V. Since this re-rating would have the effect of reducing the product of income tax, profits tax and surtax the Government intended to make some reduction in the grants to allow for this. The estimated product of rates from re-rating in 1956/57 was £30 million in England and Wales and £2.3 million in Scotland. While the Government felt that there was a strong case for reducing the grants by the whole product of re-rating they indicated that they were prepared to restrict this reduction to two-thirds.

4. Payments of rates by nationalised industries.

Payments in lieu of rates made by the nationalised gas, electricity and transport industries would now be included in the rating system and treated as rates, rateable values being arrived at for these industries on the basis of formulae provided. This proposal was not applied to Scotland the Government taking the view that as the valuation and rating system in Scotland had recently been the subject of radical reform under the Valuation and Rating (Scotland) Act 1956 and as all rateable values were frozen under the Act until 1961 further amending legislation was not desirable meantime.

5. General Grant - Aggregate Amount.

It was proposed to replace as many as practicable of the specific / -

specific grants which were on a percentage basis by a general grant of an amount fixed in advance for a short period of years, though not necessarily at the same level for each year of the period. This general grant was to be distributed by reference to objective factors (mainly of weighted population) which could not be influenced by the decisions of individual authorities "and which afford a fair and reasonable measure of the relative needs of each authority".

The grants to be replaced by the General Grant were those for -

Education (but not school milk and meals)
Health Services under the National Health Service Act 1946
Fire
Child Care
Town Planning (But not grants for blitz redevelopment in England and Wales or major redevelopment in Scotland)
Road Safety
Traffic Patrols
Registration of Electors
Physical Training and recreation
Residential and temporary accommodation under the National Assistance Act 1948.
School Crossing Patrols

Expenditure on advanced technological education and a wide range / -

range of further education was to be pooled and shared between all local education authorities, the pooling arrangement being a recognition of the national nature of this expenditure.

Initially the grant period was to be two years, a different amount of grant being prescribed for each year. The total amount for each year would be decided by the Government (after discussion with the associations of local authorities) and announced by White Paper, the figure then being embodied in an Order. In determining the total of the grant for any period the Minister is required to take into consideration -

"(a) the latest information available to him of the rate of relevant expenditure (excluding, except in so far as the Minister or Secretary of State with the consent of the Treasury otherwise determines, any expenditure of a description in respect of which no grant has been paid for any year ending before the sixteenth day of May, Nineteen hundred and Fifty-nine) and the current level of prices, costs and remuneration, together with any future variation in that level which can be foreseen;

(b) any probable fluctuation in the demand for the services giving rise to relevant expenditure, so far as the fluctuation is attributable to circumstances / -

circumstances prevailing in Scotland as a whole which are not under the control of local authorities; and

(c) the need for developing those services and the extent to which, having regard to general economic conditions, it is reasonable to develop those services." [1]

He is also required to take into account the levels of remuneration and prices current at the time together with any foreseeable variations. In the event of unforeseen increases during the grant period of such magnitude as cannot reasonably be borne by the local authorities (e.g. a teachers' salary award) provision is made by way of an Increase Order.

The Government also took the opportunity to abolish a number of minor specific grants.[2] All of these proposals in so far as they affected England and Wales were given effect to by the Local Government Act 1958 which also gave effect to the recommendations of the Edwards Committee on the E.E.G. which was now renamed Rate-Deficiency Grant. The provisions relating to Scotland were contained in the Local Government and Miscellaneous Financial Provisions (Scotland) Act 1958.

The / -

1. Sec. 2, Local Government and Miscellaneous Financial Provisions (Scotland) Act 1958.

2. See Appendix No.3.

The effect of all of the changes in the 1958 Act (e.g. the re-rating of industry, the dropping of the children weighting from the English Rate Deficiency Grant) was such that it resulted in a reduction in the total of the Rate-Deficiency Grants and consequently of the Scottish E.E.G. since it was related to the Grant payable in England. To compensate for this reduction the Government added to the General Grant the amount of the reduction in R.D.G. and E.E.G. The Act of 1948 which established the E.E.G. had contained a guarantee provision (Section 3(3) and (4)) whereby the proportion which the aggregate "rateable value credited" for England and Wales bears to the rateable value for England and Wales would not be allowed to fall below that obtaining in 1948/49. This was abolished by the Local Government Act 1958, the Government's intention evidently being to make any adjustment deemed necessary in future by way of addition to the General Grant.

As is usual whenever a major alteration in Grants is made which result in a change in the distribution among authorities transitional arrangements were provided for, the object of the transitional scheme being to ensure that the gains and losses would take effect gradually. This was done by financing grants to the losers out of gains temporarily withheld from the gainers sufficient to meet the losses. The transitional period was not to exceed ten years, losses being made good to the extent of 100% in the first year 1959/60, 90% in the second year, etc.

In order to arrive at the aggregate amount of grant to be distributed / -

distributed the Central authority called for estimates for 1959/60 and 1960/61 from each authority of its expenditure on those services the specific grants for which were replaced by the General Grant (but not those services the minor grants for which were abolished). The estimates were to allow for the development of the services but they were to be based on price and wage levels then in force allowing only for known increases pending. Thus no allowance was to be made for possible inflation. These estimates were required to be supported by certain statistics, e.g. the number of teachers, pupils, firemen, children in care, etc., the object of which was to enable the Central Departments to check the realistic nature of the estimates. In a number of cases they were able to show that while individual authorities might wish to recruit the manpower budgetted for, having regard to the available supply of manpower in particular professions the total demands were unlikely to be met. After scrutiny by the representatives of the central government and consultations with the local authority representatives adjusted figures were finally agreed as being the estimates to be taken for the purpose of calculating the aggregate grant.

The procedure adopted was to apply the rates of grant which had formerly obtained under the percentage grant system to the totals of estimated expenditure under the various specific services, e.g. Health Service Expenditure 50%, Fire 25%, etc., in order to arrive at an aggregate grant for distribution. The General Grant Order 1958 (England and Wales) and the General Grant Order 1958(Scotland) provided for the total grants to be paid in 1959/60 and in 1960/61. The following example made up from the figures contained in these Grant Orders shows the method / -

method of arriving at the aggregate grant for 1959/60.

	England and Wales[1] 1959/60 £ millions	Scotland[2] 1959/60 £ millions
Estimated expenditure on "Relevant Services"	707.8	80.235
Specific grants which would have been payable on this relevant expenditure	399.9	49.659
Less Deduction to offset re-rating income ($\frac{2}{3}$)	20.0	1.5
	379.9	48.159
Add Compensation for reduction in R.D.G. or E.E.G.	11.75	1.9
Compensation for discontinued minor grants	1.5	.065
	393.15	50.124
rounded to	393. 0	50.125

1. Local Government Finance (Eng. and Wales) General Grant Order, 1958
2. " " " Scotland "

Subsequently these figures were increased by the General Grant Increase Order 1960 to take account of salary awards to teachers, nursing staff and local government officers.

As the consultations between Central authority representatives and local authority representatives in connection with the determining of the aggregate grant for the next Grant Order period viz. 1961/62 and 1962/63 the representatives of the Central Department indicated that it was considered wrong to continue using specific grant percentages when the whole principle of the general grant was to get away from such calculations. They suggested that instead of adding up the various specific grants which might have been payable on the old system and adjusting for re-rating, discontinued grants and E.E.G. changes, that there should be applied to the relevant expenditure a uniform percentage, this percentage to be arrived at from the ratio which the aggregate grant in the first grant order period bore to the estimated relevant expenditure for that period. For Scotland this was 62.4% and for England and Wales 55.5%, although it was stated that there was no suggestion that the general grant should be permanently fixed at these percentages of expenditure; any major change in the services for which local authorities were responsible would make it necessary to consider the relationship between expenditure and grant again. It was on the basis of these percentages that the aggregate grants for the second grant period were calculated.

One might wonder why the percentage of expenditure which England and Wales received by way of grant was 55.5% while Scotland received 62.4%. The explanation lies in the history of the Education Grant / -

Grant for Scotland. The total of the Scottish Education Grant had for long been determined at 11/80ths of the Grant payable in England in accordance with the Goschen formula. The Goschen formula which has on a number of occasions been used to regulate the respective shares of Exchequer funds for England and Scotland was first introduced in 1888.[1] It has been said that originally it was supposed to represent the contributions from taxation to the Exchequer by the two countries[1] although it is more probable that it was arrived at largely on the basis of population figures, e.g. the Scottish population as a percentage of that for England and Wales in 1891 was 13.88% while the Goschen formula of 11/80ths expressed as a percentage is 13.75%.

Table No. 2.

	Population		Scottish Population as a percentage of England and Wales population
	England & Wales	Scotland	
1881	25,974,439	3,735,573	14.38%
1891	29,002,525	4,025,647	13.88%
1961	46,071,604	5,178,490	11.24%
Goschen formula as a %age			13.75%

By 1961 however, the Scottish population was only 11.24% of that of / -

1. Vide Royal Commission on Local Taxation - Scotland, Op.cit. p.15

of England and Wales. In so far as England's needs in terms of population had increased more than Scotland's, England was spending more than her "Goschen" equivalent the benefit of which accrued to Scotland since her total grant was 11/80ths of England's grant although her needs in terms of the population ratio had diminished. Consequently the Scottish Education Grant represented a much higher percentage of education expenditure than did the English Grant.

6. Distribution Formula.

The formula for the distribution of the General Grant in England and Wales to the 83 county boroughs, 61 counties and the London County Council for 1959/60 and 1960/61 was as follows:-

Basic Grant

(a) Per head of population £5.75 (£6.05)

(b) For each child under 15 £.52 (£.54)

Supplementary Grants

(c) Young children (under 5) and old people (over 65) £.42 (£.43)

(d) School children etc. £.058 (£.06) per head of population multiplied by the number of pupils etc. per 1,000 population in excess of 110.

(e) High Density. A percentage of the basic grant being half the amount by which the number of persons per acre exceeds 18.

(f) / -

(f) Low Density. A percentage of the basic grant payable where road mileage exceeds 2 per 1,000 population; the percentage being $2\frac{1}{4}$ times the road mileage per 1,000 population with a maximum of 70%.

(g) Declining Population. A percentage of the basic grant being half the amount by which the decline in population over the past 20 years exceeds 5%.

(h) High cost in Metropolitan District. 5% of the basic grant to authorities wholly or partly in the Metropolitan Police District.

(i) Less: Product of a 8d. rate.

These figures of £5.75, £.52 etc. are adjusted at each grant review so as to distribute the total of the Grant.

The Scottish Grant which is initially calculated for each education area is distributed on the basis of weighted population.[1] The first weighting is to add the number of children under 15 to the actual civilian population. Two further weightings are added to reflect, / -

1. See appendix No.4 for details of the weightings for the ratio of landward to total population and that for sparsity in terms of pupils per mile of roads.

reflect, first, the ratio of the landward population to the total population in each county, and secondly, the geographical sparsity of the school population. The first of these additional weightings is justified by the consideration that the cost of educational and other services provided for a predominantly landward population is relatively greater than the cost of providing the same service for more compact urban units. The second recognises that educational costs are specially high in sparsely populated areas.

The grant calculated initially for each education area is, for county areas, then allocated among the rating areas in the county in the same way as expenditure is apportioned - that is, according to their rateable or standard rateable value, whichever is the higher.

7. Reduction of aggregate grant and Pooling Arrangement.

Under the former specific grant system the Government had been empowered to meet certain expenditure centrally and re-charge part to local authorities by deduction from the fire service and children's grants. Under the General Grant system the local authorities' share is recovered by deduction from the total of the General Grant. In Scotland this also applies to payments made to the universities under Sec. 70 of the Education (Scotland) Act 1946.

It was also considered that certain items of expenditure incurred by authorities were of a national character which benefited all authorities, e.g. advanced further education and that it was right that this should be shared by all irrespective of whether it was mainly incurred by / -

by a few. This expenditure is therefore pooled and shared between the authorities, the pooling arrangement being secured by the Central authority adding or deducting appropriate sums for each authority's general grant. It is not intended to give any detailed consideration to the pooling arrangement since it is a minor refinement to the Grant.

We have seen therefore that as from 1959/60 the Government replaced the majority of the percentage grants on specific services by a General Grant in total approximately equal to what would have been paid under the percentage grant system and that this total Grant was then distributed to individual authorities on the basis of "objective" factors not capable of being influenced by the decisions of individual authorities.

8. Analysis of the General Grant Distribution Formula.

Attention was drawn in Ch. 1 to the essentially taxing and subsidising nature of equalisation grants and it was said that it was as though we increased the income base in the first place and then reduced it or increased it according as the needs of the authorities were above or below average. It was seen that in the case of the E.E.G. each authority with a per capita tax base below the standard was brought up to that standard so as to give each the same potential per capita tax base, this being then scaled up or down having regard to the authority's needs.

Since the General Grant is an equalisation grant it must have similar features and we take the Scottish General Grant first to illustrate / -

illustrate this since it is more easily analysed than the English Grant.

From Appendix Table No.A.2 which shows the details of the General Grants for 1959/60 for each authority the following summary is prepared:-

Population of all authorities		5,168,992
Add for weightings -		
Children under 15	1,306,690	
Pupils per mile of road	132,583	
Ratio of Landward/Total Populations	156,679	1,595,952
Weighted Population		6,764,944
Total of General Grant		£51,134,239

General Grant per head of weighted population = 7.55870839

" " unweighted " = 9.89249722

Ratio of Children under 15/total unweighted population = .252793968

" Pupils per mile weighting/ " = .0256496818

" Landward weighting/ " = .0303113256

Now it is obvious that if allauthorities had the same ratios for children under 15 to their total populations, etc., the weightings would have no effect on the grant received by them and we could distribute the grant solely on unweighted population. The differences in grant arise because ratios of children to populations, etc., are either above or below the average ratios of children to population, etc. If we take as an example the figures for Aberdeen / -

Aberdeen City.

Aberdeen City

Unweighted Population		186,350
Add for weightings -		
Children under 15	44,759	
Pupils per mile of road	Nil	
Ratio of landward/total population	Nil	44,759
		231,109

Aberdeen's ratio of children to total unweighted population .2401878

General Grant 231,109 x .55870839 = £1,746,886

Breakdown of General Grant -

Unweighted Population	186,350 x £9.89249722	£1,843,467
Children Factor	186,350 (.2401878 - .2527939) x 7.55870839	= -17,756
Pupils per mile Factor	186,350 (Nil - .02564968) x 7.558	= - 36,129
Landward/Total Population Factor	186,350 (Nil - .030311325) x 7.55870839	= - 42,695
		£1,746,887

Obviously then the per capita subsidy may be expressed in this way:-

$$S_i = 9.892..... + 7.558.....(N_i^{1} - \bar{N}^{1}) + 7.558.....(N_i^{11} - \bar{N}^{11}) + 7.558.....(N_i^{111} - \bar{N}^{111})$$

where N_i^{1} = ratio of children under 15/total population of an authority

N_i^{11} = " " weighting for pupils per mile of road/" "

N_i^{111} / -

N_i^{III} = ratio of weighting for landward population/

$\bar{N}_i^{I} = \frac{\sum_i (N_i^{I} p_i)}{\sum_i p_i}$

and similarly for $\bar{N}^{II}$ and $\bar{N}^{III}$

Turning now to the English General Grant but omitting the factors for high and low density, declining population and high cost in the Metropolitan area, items (e), (f), (g), (h) on pages 117 & 118 the following summary is prepared from the English General Grant Order 1960:-

Basic grant:

(i)	Population amount (45,755,001 x £6.51)	£297,865,062
(ii)	Amount for children under 15 (10,472,000 x £.58)	6,073,760

Supplementary grants:

(i)	Young children and old people (8,915,000 x £.53)	4,724,950
(ii)	School children, etc.	137,345,663
		£446,009,435
	Less Rate Product Deduction	22,850,185
		£423,159,250

Now General Grant = $6.51p_i + .58c_i^{I} + .53c_i^{II} + .53p_i^{I} + .066p_i$

$$\left(\frac{c^{III} \times 1000}{p_i} - 110\right) - .033R.V.^2$$

1. The treatment of these items is omitted because of lack of information.
2. p_i = population of authority
   c_i^{I} = children under 15 "
   c_i^{II} = " " 5 "
   p_i^{I} = persons over 65 "
   c_i^{III} = scholars "

$$= 6.51p_i + .58c_i^{1} + .53c_i^{11} + .53p_i^{1} + 66c_i^{111} - 7.26p_i - .033R.V.$$

Dividing through by p_i we get the per capita subsidy

$$s_i = 6.51 + .58\frac{c_i}{p_i} + \frac{.53c_i^{11}}{p_i} + \frac{.53p_i^{1}}{p_i} + \frac{66c_i^{111}}{p_i} - 7.26 - \frac{.033R.V.}{p_i}$$

$$= -.75 + .58N_i^{1} + .53N_i^{11} + .53N_i^{111} + 66N_i^{1111} - .033B_i$$

where N_i^{1} = ratio of children under 15/population

N_i^{11} = " " 5/ "

N_i^{111} = " persons over 65/ "

N_i^{1111} = " schoolchildren/ "

Now $\sum_i(p_i s_i) = £423,159,250$

$$\therefore \sum_i \left\{-.75p_i + .58N_i^{1}p_i + .53N_i^{11}p_i + .53N_i^{111}p_i + 66N_i^{111}p_i - .033B_i p_i\right\} = 423,159,250$$

$$\therefore \sum_i(-.75p_i) + \sum_i(.58N_i^{1}p_i) + \sum_i(.53N_i^{11}p_i) + \sum_i(.53N_i^{111}p_i) + \sum_i(66N_i^{1111}p_i)$$

$$- \sum_i'(.033B_i p_i) = 423,159,250$$

$$\therefore -.75\sum_i' p_i + .58\sum_i'(N_i^{1}p_i) + .53\sum_i'(N_i^{11}p_i) + .53\sum_i'(N_i^{111}p_i) + 66\sum_i'(N_i^{1111}p_i)$$

$$- .033\sum_i'(B_i p_i) = 423,159,250.$$

$$\therefore -.75 = \frac{-.58\sum_i(N_i^{1}p_i)}{\sum_i' p_i} - \frac{.53\sum_i'(N_i^{11}p_i)}{\sum_i' p_i} - \frac{.53\sum_i'(N_i^{111}p_i)}{\sum_i' p_i} - \frac{66\sum_i'(N_i^{111}p_i)}{\sum_i' p_i}$$

$$+ \frac{.033 \sum_i (B_i p_i)}{\sum_i p_i} + \frac{423,159,250}{\sum_i p_i}$$

By definition

$$\bar{N}^{1} = \frac{\sum_i (N_i^{1} p_i)}{\sum_i p_i}$$

Similarly for $\bar{N}^{11}$, $\bar{N}^{111}$, $\bar{N}^{1111}$, $\bar{B}$

$$\therefore -.75 = -.58\bar{N}^{1} - .53\bar{N}^{11} - .53\bar{N}^{111} - 66\bar{N}^{111} + .033\bar{B} + \frac{423,159,250}{45,755,001}$$

Substituting for -.75 we $\therefore$ obtain:-

$$S_i = 9.25 + .58(N_i^{1} - \bar{N}^{1}) + .53(N_i^{11} - \bar{N}^{11}) + .53(N_i^{111} - \bar{N}^{111}) + 66(N_i^{1111} - \bar{N}^{1111}) + .033(\bar{B} - B_i)$$

The Scottish grant formula is similar to the first part of formula (5) ($S_i = c + m\ (N_i - \bar{N}) + t_s(\bar{B} - B_i)$. Since it is concerned only with the expenditure side it does not contain a term similar to the second part of the formula ($t_s(\bar{B} - B_i)$). The English grant formula on the other hand contains the second part since there is an element of correction for the resources side in the grant. Unlike formula (5) however, $m^{1}\bar{N}^{1} + m^{11}\bar{N}^{11}$ etc. does not equal $t_s\bar{B}$. The $.033\bar{B}$ in the formula is present not for the same reason as the $t_s\bar{B}$. in formula (5). Its presence is probably to be explained by practical considerations. Whenever a new formula for a grant of this nature is being devised one of the main considerations present in the minds of those who frame it is to create as little disturbance as possible in the existing pattern of distribution[1]. The Scottish Working Party for example tried twenty formulae before they found the one to "fit". Now the former Education grant contained a rate deduction factor[2] and since Education was the largest of the specific grants replaced by the General Grant it was probably necessary to retain at least a portion of the rate deduction factor in order that the new distribution formula should give results not too widely different from the existing basis of distribution.

The £66 in the General Grant formula would appear to be arrived at on the basis of the estimated total Education expenditure divided by the total number of pupils and is therefore, as it were, the amount which / -

1. Cf. Mabel Newcomer, Central and Local Finance in Germany and England, Oxford University Press, 1937.
   An official connected with the preparation of the 1929 Act Block Grant formula told Dr. Newcomer that "they knew just what results they wanted and this (the formula) gave these results".
2. The Education Grant (England) was £6 per pupil plus 60% of the education expenditure less the product of 30d rate.

which in the opinion of the central authority should be spent annually on the education of one child. Similarly, the co-efficients of .53 for children under 5 and persons over 65 may be roughly arrived at on the basis of estimated expenditure on child care divided by the number of children under 5 and the estimated expenditure on residential homes, etc., for old folks divided by the total number of persons over 65. These have all the appearance of conforming to our "minimum outlay necessary to achieve a centrally set level of performance". The presence of the .58 for children under 15 may be for reasons of expediency similar to the £.033 rate deduction factor in that the weighting for children under 15 was previously contained in the E.E.G. being dropped from that Grant on the introduction of the General Grant.

The Scottish Working Party in experimenting with various formulae tried first the English formula (modified) but found that it did not give the required result. This was not surprising since the situation re the grant in England was different from that in Scotland. In England the services in respect of which specific grants were replaced are functions of the county councils and county boroughs and it is to these authorities that the General Grant is paid - in the case of the counties the grant being deducted from their gross expenditure to arrive at a net sum which is precepted on the rating authorities on the poundage basis. Thus since the grant is calculated for the unit which incurs all the expenditure it is possible to include measures of need in respect of the various services such as education, health services and care of the old. In Scotland on the other hand the services in respect of which the General Grant is provided are not all functions of the county council. Education is the only service (of those / -

those incorporated in the General Grant) for which the County Council is responsible throughout the whole area of the county. Fire is provided by joint committees consisting of several authorities. The remaining services such as health services, etc., are administered by the large burghs for their own areas and by the county council for the small burghs and the landward area of the county. Consequently, since the grant is calculated initially for the education area(and then subsequently allocated on the basis of standard or actual R.V. whichever is higher) it cannot reasonably provide measures of need associated with services other than education. The Scottish distribution formula therefore can only be concerned with the Education service. This is confirmed by Mr.A.L Imrie[1] (a member of the Working Party and City Chamberlain of Edinburgh). For the Scottish General Grant to be able to take account of factors associated with the other services it would have required to be broken down and portions provided for health and other services each portion distributed direct to the units which originally incurred the expenditure in which case measures of need in respect of these services could reasonably be incorporated in the formula. It would seem that as a general principle in a scheme of equalisation the calculation of grant should be made separately for the decision making units which incur the expenditure. We shall take this point up later in our empirical investigation of the E.E.G. and the General Grant when it will be seen that the present organisational structure of local government is an impediment to an effective scheme of equalisation.

The English Grant formual has a more logical appearance than / -

1. A.L. Imrie, "The Scottish Local Government Bill", Paper given at Eastbourne Conference, I.M.T.A., 12th June, 1958.

than the Scottish formula in that the £66, etc., can readily be seen to be the necessary minimum outlay on the education of a pupil, etc. The wider range of pupil costs in Scotland, e.g. from £66 in the county of Renfrew to £149 in the county of Sutherland[1] makes the use of a standard expenditure per pupil for all authorities in Scotland inappropriate, a situation which obviously also obtained in Lord Balfour of Burleigh's day. The Scottish formula as will be seen in Part II of this thesis has therefore been empirically devised so as to give each authority roughly the same percentage of its education expenditure at the time of the introduction of the General Grant.

Attention was drawn in Ch.I (p.21) to the fact that the redistributional formula for an equalisation of fiscal capacity to provide a centrally set level of expenditure gives rise to the fact that some authorities may be called upon to contribute to the services of others which, while needy, refuse to make an adequate effort of their own. A similar criticism is sometimes levied against the General Grant. This is because while there is no direct relationship between an authority's grant and its expenditure, there is a relationship between the aggregate expenditure of authorities and the aggregate General Grant. If one authority is expanding its General Grant services at a greater rate than other authorities the increased expenditure arising out of such greater expansion may help to earn increased grant for the whole country but only a small proportion of this increase in grant will accrue to that authority. Hence / -

1. "Rating Review" 1960.

Hence the suggestion made in certain quarters that "progressive" authorities may be helping to subsidise less "progressive authorities.

The long run effect of the General Grant could be to lead to a contraction of local authority expenditure. This view might be questioned since the total grant is arrived at as a percentage of the relevant expenditure and is approximately equal to the Grant which would have been payable under the former system. But since each local authority must bear the full cost of expenditure in excess of the standard those authorities who are anxious to expand and provide the services will require to limit this expansion after they have progressed beyond the standard and those who do not wish to expand the services will gain further by reducing their expenditure since it will not reduce their grant. Ultimately therefore there may tend to be a contraction of total expenditure which will arise both from the necessity on the part of the spenders to limit their expenditure and from the advantage to be derived by the "non spenders" from reducing their expenditure.

P A R T II.

EMPIRICAL INVESTIGATION.

Chapter VI.

The Exchequer Equalisation and General Grants

General

1. Introduction.

The second part of this thesis is directed to an empirical investigation into the operation of the Exchequer Equalisation Grant and General Grant in Scotland. The year principally chosen for investigation is 1959/60, the first year of the General Grant, although data for other years will be provided where this is necessary. Primarily the object is to see if, in fact, some form of equalisation has been achieved but at the same time the opportunity will be taken of giving other information which, while it may have little bearing on the immediate purpose of the study, will help to fill the gap in our statistical knowledge of the grant operations in Scotland. The investigation is confined to the Counties of Cities, the Counties (landward area) and the large burghs. The small burghs have been excluded from the investigation, not because their importance is under-estimated but because of the necessity of keeping the scope of the study within reasonable bounds.

In this chapter an endeavour is made to give some idea of the nature of the problem having regard to the widely differing sizes of the administrative unit and the varying conditions under which services have to be provided. An attempt is also made to place the grants in perspective / -

perspective in relation to the finances of local authorities and to obtain some idea of their scope and magnitude.

2. The Scottish Economy and the Sizes of Administrative Units.

In area Scotland comprises some 29,724 square miles. With a population of 5,178,490 according to the 1961 Census this gives an average density of 174 persons per square mile as against that for England and Wales of 790 persons per square mile. Of this total population, however, approximately 4 million or 76.5% is concentrated in the central industrial belt - an area of some 4,277 square miles with a density of 925 persons per square mile[1]. The Northern Division (ex Crofting Counties) comprises some 13.3% of the total population with a density of 90 per square mile while the Southern Division including the Border Counties (4.8% of total population) has a density of 57 per square mile. The Crofting Counties which form the "problem area" of the Scottish economy, have a density of only 20 per square mile, being inhabited by 5.4% of the population (see Table No.3).

Table No.3 / -

1. Central Industrial Belt West Division	Central Industrial Belt East Division	Northern Division (ex Crofting Counties)
Ayr County	Clackmannan County	Aberdeen County
Dunbarton County	East Lothian County	Angus County
Lanark County	Fife County	Banff County
Renfrew County	Stirling County	Bute County
Glasgow	West Lothian County	Kincardine County
Southern Division	Edinburgh	Moray & Nairn County
other than	Dundee	Perth & Kinross County
Border Counties)	Border Counties	Crofting Counties.
Dumfries County	Berwick County	Argyll County
Kirkcudbright County	Peebles County	Caithness County
Wigtown County	Roxburgh County	Inverness County
	Selkirk County	Orkney County
		Ross & Cromarty County
		Sutherland County
		Zetland County

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Border Counties)	Dundee	Perth & Kinross County
Dumfries County	Border Counties	Crofting Counties.
Kirkcudbright County	Berwick County	Argyll County
Wigtown County	Peebles County	Caithness County
	Roxburgh County	Inverness County
	Selkirk County	Orkney County
		Ross & Cromarty County
		Sutherland County
		Zetland County

Table No. 3.

	Population 1961 Census	%age of Total Population	Density per Sq.Mile
	(1)	(2)	(3)
1. West Central	2,495,849	48.1	1,000
2. East Central	1,473,863	28.4	827
3. Northern (ex Crofting Counties)	692,109	13.3	90
4. Southern (other than Border counties)	145,128	2.8	58
5. Border Counties	99,084	2.0	57
6. Crofting Counties	277,897	5.4	20
	5,183,930	100.0	174

The increase in the population of Scotland over the past 90 years has not kept pace with that of England and Wales, Scotland showing an increase over 1851 of 79% as against that for England of 159% and Wales of 127% This is largely due to Scotland's traditional loss by migration. Over the period 1861 - 1961 the net loss by migration was 1,840,000 - each census period consistently showing a loss. The net loss over the period 1951-61 was 254,701 persons as against 248,859 for the 20 year period 1931 - 51, whereas for England and Wales there was a net gain from migration / -

migration of 524,000 from 1931 - 39, 231,000 from 1939 - 51 and 352,000 from 1951 - 61.[1]

Within Scotland the picture is one of a gradual movement of population out of the Crofting Counties and the Border Counties with an increase in the population of the industrial belt. The greatest concentration of the population is in the Glasgow and Clydeside area which also for many years witnessed the greatest relative increase in population. In recent years, however, the tendency has been for the growth of population in the central and eastern portions of the industrial belt to exceed that of the western portion. There is the likelihood of this trend continuing in the near future as a result of the planned overspill programme from Glasgow, the setting up of the new B.M.C. factory in West Lothian, the creation of the new town at Livingston, and a number of other industrial projects in the area of Midlothian and West Lothian.

In Scotland there is a wide variation in the size of local government administrative units and in the conditions under which they operate. Some idea of the extent of this may be obtained from Table No.4, which shows the populations and density of the Counties of Cities and the County Councils (including the landward area and the large and small burghs). At one extreme we have Glasgow with a population of 1,056,008 and a density of 17,469 persons per square mile and at the other extreme we have Sutherland with a population of only 13,290 and a density of 7 persons per square mile. Within the counties there is a further subdivision for small burghs and large burghs (where appropriate).

Table No.4. / -

1. Census 1961 Scotland and Census 1961 England and Wales - Preliminary Reports.

Table No. 4.

Populations and Density (population per square mile).

West Central Division	Population	Density
Glasgow	1,056,008	17,469
Renfrew	340,389	1,508
Ayr	340,690	303
Dunbarton	186,660	765
Lanark	572,102	682
East Central Division		
Edinburgh	474,062	9,003
Dundee	182,854	9,574
East Lothian	51,664	197
Midlothian	113,164	356
Stirling	194,335	432
Clackmannan	41,342	758
Fife	322,561	635
West Lothian	93,881	772
Northern Division (ex Crofting Counties)		
Aberdeen City	185,222	10,752
Bute	14,425	69
Perth and Kinross	131,258	51
Moray and Nairn	58,440	91

Angus / -

Table No.4 Cont'd.

Populations and Density (Population per Square Mile).

	Population	Density
Angus	95,732	112
Kincardine	25,577	129
Aberdeen	135,304	70
Banff	46,151	74
Border Counties		
Peebles	13,465	41
Selkirk	20,812	79
Roxburgh	42,691	65
Berwick	22,116	49
Southern Counties		
Dumfries	87,686	82
Wigtown	28,978	60
Kirkcudbright	28,464	32
Crofting Counties		
Caithness	27,620	40
Argyll	60,409	19
Inverness	82,838	20
Orkney	18,636	50
Ross & Cromarty	57,414	19
Zetland	17,690	32
Sutherland	13,290	7

Inevitably the unit costs of providing certain services show considerable variation. For example, in 1959-60 costs per pupil were £149 in Sutherland, £129 in Zetland, £109 in Orkney, but in Ayr, Moray and Nairn and West Lothian they were £66, £68 and £70 respectively.

3. Income of Scottish Local Authorities from Rates and Grants.

In 1959-60 the total income of local authorities in Scotland from rates and grants was £173.399 millions. Of this sum £76.894 millions or 44.35% consisted of rates and £96,505 millions (55.65%) of Government Grants. The Exchequer Equalisation Grant amounted to £14.685 millions, the General Grant £50.125 millions and specific grants £31.695 millions.

Table No.5.

Income of Scottish Local Authorities from Rates and Grants in 1959/60.

	£ millions	%
Rates	76.894	44.35
Grants -		
Exchequer Equalisation Grant	14.685	8.47
General Grant	50.125	28.90
Specific Grants	31.695	18.28
	96.505	55.65
Total	173.399	100.00

In / -

In aggregate terms, therefore, the Exchequer Equalisation Grant is not a large grant. It accounts for only 8.47% of all local authority income from rates and grants as against the General Grant which accounts for 28.90% and specific grants 18.28%

Table 6 shows the aggregate Scottish Exchequer Equalisation Grant as a percentage of that for England and Wales over the period from its inception up to 1959/60. The years from 1948/49 to 1952/53 cover the period when entitlement to Exchequer Equalisation Grant was based on the English average rateable value per head plus 25%. During this period the percentage which the Scottish grant bore to the English grant fell from 12.85% down to 10.39%. The years 1953/54 to 1955/56 cover the period when the Goschen formula obtained; the difference between the percentages of 13.56%, etc., and that of 13.75% (the Goschen formula - 11/80ths) is probably explained by the time lag in the calculations. The years 1956/57 to 1959/60 when the percentage exceeded 16% in each year covers the period when the present "burden basis" of calculating the aggregate grant obtained.

Table No. 6.

Scottish Exchequer Equalisation Grant as %age of England and Wales.

- / -

Table No.6.

Scottish Exchequer Equalisation Grant as %age of England and Wales.

Year	%	
1948/49	12.85)	
1949/50	11.38)	English average R.V. per head
1950/51	11.41)	+ 25% basis
1951/52	10.64)	
1952/53	10.39)	
1953/54	13.56)	
1954/55	13.31)	Goschen formula basis
1955/56	13.35)	
1956/57	17.01)	
1957/58	16.85)	"Burden" basis
1958/59	16.65)	
1959/60	16.55)	

Exchequer Equalisation Grant per head for Scotland was £2.891 as against £1.926 for England and Wales and General Grant £9.903 as against £8.726 giving Scotland an excess in total of £2.142 per head of population.

Table No. 7.

Exchequer Equalisation Grant and General Grant per Head 1959/60. / -

The percentage fell from 15.57% in 1948/49 to 12.22% in 1952/53 during the period when the English average R.V. + 25% basis obtained, rose to over 15% on the introduction of the Goschen formula basis and finally to 19% in 1956/57 when the "Burden basis" of calculating the aggregate grant was introduced. Since then it has fallen to just over 17% in 1959/60.

4. Degree of differential in Exchequer Equalisation Grant and General Grant.

The importance of an euqalisation grant falls to be measured not solely in aggregate terms but in the degree of differential aid which it provides to different authorities. While the Exchequer Equalisation Grant is not as large a grant as the General Grant its importance as a differential grant is greater. As will be seen from Tables 9 and 10, the Exchequer Equalisation Grant per head varies from nil for some authorities to £21 for Sutherland county whereas the General Grant per head ranges from £8.181 for Bute County to £18.436 for Sutherland

Table No. 9. / -

Table No. 9

Exchequer Equalisation Grant per head 1959/60

	R.V. Element	Children	Sparsity	"Rapidly Increasing" Population	Total
	£	£	£	£	£
Counties of Cities					
Aberdeen	1.333	- .186	- .365	- .023	.759
Dundee	1.233	+ .004	- .296	- .019	.922
Edinburgh	-	-	-	-	-
Glasgow	-	-	-	-	-
Large Burghs					
Airdrie	6.116	+ .324	- .326	- .020	6.094
Arbroath	5.217	- .015	- .280	- .018	4.905
Ayr	-	-	-	-	-
Clydebank	4.752	+ .546	- .356	- .022	4.920
Coatbridge	6.056	+ .727	- .316	- .020	6.447
Dumbarton	3.414	+ .566	- .324	- .020	3.636
Dumfries	3.458	- .087	- .294	- .018	3.059
Dunfermline	4.515	- .197	- .307	- .019	3.992
Falkirk	2.830	- .378	- .322	- .020	2.110
Greenock	3.532	+ .291	- .280	- .017	3.527
Hamilton	4.115	+ .260	- .297	- .019	4.059
Inverness	1.168	+ .033	- .317	- .020	.864
Kilmarnock	1.858	+ .041	- .339	- .021	1.539
Kirkcaldy	4.015	+ .001	- .337	- .021	3.658
Motherwell & Wishaw	3.112	+ .179	- .302	- .019	2.970
Paisley	3.190	+ .008	- .287	- .018	2.893
Perth	2.094	- .173	- .318	- .020	1.583
Port Glasgow	5.650	+ .644	- .266	- .017	6.011
Rutherglen	3.895	- .187	- .352	- .022	3.334
Stirling	1.906	- .109	- .324	- .020	1.453

Table No. 9

Exchequer Equalisation Grant per head 1959/60

	R.V. Element	Children	Sparsity	"Rapidly Increasing" Population	Total
	£	£	£	£	£
Counties (Landward)					
Aberdeen	6.406	+ .033	+ .529	- .015	6.953
Angus	6.453	- .169	- .252	- .016	6.016
Argyll	5.635	- .436	+ 2.899	- .016	8.082
Ayr	3.381	+ .029	- .254	+ .064	3.220
Banff	9.194	+ .063	+ .141	- .016	9.382
Bute	2.362	- .602	- .232	- .015	1.513
Berwick	6.205	- .361	+ 2.575	- .015	8.404
Caithness	7.720	- .094	+ .379	+ .994	8.999
Clackmannan	2.979	+ .492	+ .274	+ .229	3.974
Dumfries	4.823	- .057	+ .791	- .017	5.540
Dunbarton	3.484	+ .148	- .342	+ .139	3.429
East Lothian	3.464	- .045	- .240	- .015	3.164
Fife	5.348	+ .369	- .300	- .019	5.398
Inverness	5.922	- .134	+ 4.057	- .016	9.829
Kincardine	5.780	+ .072	+ .965	- .013	6.804
Kirkcudbright	5.119	- .030	+ 2.336	- .013	7.412
Lanark	3.599	+ .154	- .294	- .018	3.441
Midlothian	3.321	+ .309	- .260	+ .139	3.509
Moray & Nairn					
Moray	4.347	- .020	- .170	- .011	4.146
Nairn	6.496	- .316	- .231	- .014	5.935
Orkney	8.508	- .153	+ 1.900	- .012	10.243
Peebles	-	-	-	-	-
Perth & Kinross					
Perth	4.094	- .273	+ .499	- .014	4.306
Kinross	4.846	- .388	+ .532	- .016	4.974
Renfrew	.694	- .372	- .246	- .015	.061
Ross & Cromarty	9.660	- .134	+ 1.378	- .016	10.888
Roxburgh	5.697	- .277	+ .307	- .014	5.713
Selkirk	6.849	- .484	- .278	- .019	6.068
Stirling	5.551	+ .051	- .340	- .021	5.241
Sutherland	8.832	- .150	+12.357	- .018	21.021
West Lothian	5.887	+ .087	- .295	- .018	5.661
Wigtown	7.324	+ .324	+ 1.002	- .016	8.634
Zetland	15.845	- .545	+ 4.048	- .022	19.326

Table No. 10

General Grant per head 1959/60

	Basic	Children Under 15	Pupils per Mile of Road	Landward/Total Population	Total
	£	£	£	£	£
Counties of Cities					
Aberdeen	9.892	- .095	- .194	- .229	9.374
Dundee	9.892	- .009	- .194	- .229	9.460
Edinburgh	9.892	- .207	- .194	- .229	9.262
Glasgow	9.892	+ .041	- .194	- .229	9.510
Large Burghs					
Airdrie	9.934	+ .133	- .195	+ .150	10.022
Arbroath	9.999	- .110	- .196	- .232	9.461
Ayr	10.229	- .005	- .200	- .237	9.787
Clydebank	9.807	+ .120	- .192	- .227	9.508
Coatbridge	10.170	+ .137	- .200	+ .153	10.260
Dumbarton	9.850	+ .120	- .193	- .228	9.549
Dumfries	9.394	- .040	- .184	+ .141	9.311
Dunfermline	9.674	+ .035	- .190	- .224	9.295
Falkirk	9.183	- .013	- .180	- .213	8.777
Greenock	9.619	+ .023	- .189	- .223	9.230
Hamilton	9.922	+ .133	- .194	+ .149	10.010
Inverness	8.200	- .031	+ 1.563	+ .750	10.482
Kilmarnock	9.759	- .005	- .191	- .226	9.337
Kirkcaldy	9.769	+ .035	- .191	- .226	9.387
Motherwell & Wishaw	9.868	+ .133	- .193	+ .148	9.956
Paisley	9.432	+ .022	- .185	- .218	9.051
Perth	9.600	- .170	- .188	- .222	9.020
Port Glasgow	9.889	+ .023	- .194	- .229	9.489
Rutherglen	9.642	+ .130	- .189	+ .145	9.728
Stirling	9.314	- .013	- .183	- .216	8.902

Table No. 10

General Grant per head 1959/60

	Basic	Children under 15	Pupils per Mile of Road	Landward/Total Population	Total
	£	£	£	£	£
Counties (Landward)					
Aberdeen	9.884	+ .064	+ .562	+ 1.659	12.169
Angus	9.932	- .110	- .195	- .230	9.397
Argyll	9.892	- .217	+ 2.451	+ .149	12.275
Ayr	9.800	- .005	- .192	- .227	9.376
Banff	9.950	+ .097	+ .185	- .230	10.002
Bute	7.806	- .186	+ .742	- .181	8.181
Berwick	9.888	- .242	+ 2.073	+ 1.660	13.379
Caithness	9.841	+ .059	+ .559	+ .148	10.607
Clackmannan	10.022	+ .160	- .197	- .232	9.753
Dumfries	10.129	- .043	- .199	+ .153	10.040
Dunbarton	9.617	+ .117	- .188	- .223	9.323
East Lothian	9.518	+ .000	- .186	- .220	9.112
Fife	10.021	+ .036	- .196	- .232	9.629
Inverness	10.774	- .041	+ 2.053	+ .985	13.771
Kincardine	10.012	+ .008	+ 1.142	+ .916	12.078
Kirkcudbright	9.950	- .045	+ 2.086	+ .910	12.901
Lanark	9.859	+ .133	- .193	+ .148	9.947
Midlothian	9.930	+ .144	- .195	+ .150	10.029
Moray and Nairn					
Moray	9.890	+ .064	- .194	- .229	9.531
Nairn	9.688	+ .063	- .190	- .225	9.336
Orkney	9.916	- .102	+ 2.458	+ 1.664	13.936
Peebles	10.313	- .259	+ .980	- .239	10.795
Perth and Kinross					
Perth	10.012	- .177	- .196	- .233	9.406
Kinross	10.024	- .177	- .196	- .233	9.418
Renfrew	9.686	+ .023	- .190	- .224	9.295
Ross and Cromarty	9.864	- .078	+ 1.503	+ 3.540	14.829
Roxburgh	9.900	- .238	+ 1.130	- .229	10.562
Selkirk	9.927	- .270	- .195	- .230	9.232
Stirling	9.448	- .014	- .185	- .218	9.031
Sutherland	9.896	- .110	+ 3.209	+ 5.441	18.436
West Lothian	9.842	+ .137	- .193	+ .148	9.934
Wigtown	9.999	+ .149	+ .950	+ .150	11.248
Zetland	9.879	- .206	+ 2.826	+ .904	13.403

The gains and losses in respect of the weightings for number of children under 15, sparsity, rapidly increasing population, etc., have been calculated following the lines of the formulae for Exchequer Equalisation Grant and General Grant shown on pages 102 and 129. Under the General Grant the basic amount per head for each of the Counties of Cities is the same £9.892 as per the formula on page 129. The reason for the varying figure in the large burghs and Counties (landward area) is that the grant is calculated initially for the education area and then allocated to the burghs and landward area on the basis of standard rateable value. On the initial calculation for the education area the basic figure per head is £9.892 but because standard rateable values are not proportional to populations, the final basic figure per head varies slightly from £9.892.

The tables demonstrate what is already well known, that the effect of the children weighting in both grants is very small. This is because there is not a wide variation in the ratios of children to population as between the different authorities. The gains and losses for children in the Exchequer Equalisation Grant range from +£.727 for Coatbridge to - £.602 for Bute County, while for the General Grant they vary from + £.149 in Wigtown to - £.270 in Selkirk, the differential being greater in the case of Exchequer Equalisation Grant than in the case of the General Grant. This is partly due to the fact that the Exchequer Equalisation Grant is a function of an authority's expenditure. Consequently for an authority with less than average numbers of children to population the greater its expenditure is the larger will its loss be in respect of the children weighting. It will be / _

be evident that if we had two authorities with the same ratio of children to population the per capita adjustment in respect of the children weighting under the General Grant formula would be identical for both authorities, but under the Exchequer Equalisation Grant formula it would vary according to the different expenditures of the authorities.

It will be evident that the gains and losses as a result of weightings for children, pupils per mile of road, etc., in the Exchequer Equalisation Grant are functions of the total expenditure of an authority on all services. This does not seem logical unless we are prepared to say that because an authority has a higher than average ratio of children to total pupulation it ought to spend more per head of population not only on education, health services, etc., which have an apparent relationship with numbers of children, but also on those services such as police, roads, fire, etc., which have no obvious connection with numbers of children. This applies also to the other weightings. It would seem, therefore, that having decided for what purpose our measures of need are provided we ought logically to apply these not to the total relevant expenditure or the total tax rate but to the expenditure or tax rate in respect of the appropriate service.

The weighting for sparsity in the Exchequer Equalisation Grant shows the largest range of differential in grant per head of all the weightings in both the Exchequer Equalisation Grant and General Grant. It ranges from - £.365 in Aberdeen City to + £12.357 in Sutherland. The rapidly increasing population factor is the least important / -

important, its effect being to reduce the grant per head at one end of the scale by - £.023 for Aberdeen City and to increase the grant by + £.994 for Caithness at the other extreme. The increase in Caithness's population in recent years is attributable to the development of the atomic energy station at Dounreay.

In the General Grant the most important weighting is that for the ratio of landward/total population. For those authorities who enjoy no weighting it gives a loss of - £.299 per head. Sutherland is the largest gainer with £5.441. The weighting for pupils per mile brings a loss to Ayr and Coatbridge of - £.2 per head while the largest gainer is Sutherland with £3.209.

The weighting for sparsity in the Exchequer Equalisation Grant and those for pupils per mile and landward/total population in the General Grant are all weightings which are associated with sparsely populated areas. The combined effect of these "sparsity" weightings is considerable. For example, they bring a total gain to Sutherland of £21.007. These sparsely populated areas are also, in general, areas of low rateable value. It is evident therefore that the sparsely populated areas receive considerable gains at the expense of the more populous areas.

CHAPTER VII.

RATE POUNDAGES.

1. Introduction.

Since the problem was seen in this country as being primarily one of widely differing rate poundages of the different authorities[1] we examine changes in rate poundages at intervals over the period from 1938/39, the year of Hicks's investigation to 1958/59, the year prior to the introduction of the General Grant.

The rates examined are actual rates levied as distinct from "true rates" calculated on the basis of actual expenditure excluding balances, the latter method being that adopted by the "Working Party on the Effects of the Local Government Act, 1948 etc. on the Finances of Local Authorities".[2] It would have been impossible for me to collect information from the various authorities for the different years involved in order to calculate "true rates" but in any event over the longer period actual rates should be a sufficiently good indication of "true rates" since it is impossible to exist on balances for any length of time. Water rates have been excluded since expenditure for domestic purposes is not recognised as relevant expenditure for Exchequer Equalisation Grant.

The / -

1. J.R. and Ursula Hicks, Standards of Local Expenditure, Op.cit.

2. Op. cit.

The figures for the 83 county boroughs are taken from "Return of Rates" and the figures for the Scottish authorities were obtained partly from "Rating Review" and partly from replies to questionnaires to local authorities where this information was not available in "Rating Review" for earlier years.

2. Burgh Rate and County Borough Rate.

Table 11 shows some measure of the dispersion of rates in the county boroughs, counties of cities and large burghs for the years from 1938/39 to 1958/59:-

Table No. 11. / -

Table No.11.

Rate Poundage - County Boroughs, Large Burghs and Counties of Cities.

	Lowest Rate	Highest Rate	Range	Arith. Average	Standard Deviation	Co-efficient of Dispersion Col.5 ÷ Col. 4
	(1)	(2)	(3)	(4)	(5)	(6)
	d.	d.	d.			
1938/39						
83 County Boroughs	94	330	236	168	39.57	23.55
20 Large Burghs	105	170	65	134	18.60	13.88
4 Counties of Cities	89	167	78			
1947/48						
83 County Boroughs	132	360	228	223	39.75	17.83
20 Large Burghs	134	246	112	189	26.75	14.16
4 Counties of Cities	96	194	98			
1949/50						
83 County Boroughs	138	300	162	219	28.	12.8
20 Large Burghs	153	206	53	169	16.21	9.60
4 Counties of Cities	98	181	83			
1952/53						
83 County Boroughs	168	336	168	252	30.23	12
20 Large Burghs	187	287	100	232	28.55	12.31
4 Counties of Cities	130	233	103			

1958/59 / -

Table No.11. (Cont'd.)

	Lowest Rate	Highest Rate	Range	Arith. Average	Standard Deviation	Co-efficient of Dispersion Col. 5 ÷ Col. 4.
	(1)	(2)	(3)	(4)	(5)	(6)
	d.	d.	d.			
1958/59						
83 County Boroughs	148	312	164	232	32.12	13.84
20 Large Burghs	228	312	94	277	25.16	9.08
4 Counties of Cities	199	329	130			

In 1938/39 the rate poundages in the 83 County Boroughs ranged from 7/10d. in Bournemouth to 27/6d. in Merthyr Tydfil, a range of 19/8d., whereas in the 20 large burghs the rate varied from 8/9d. in Perth to 14/2d. in Clydebank, a range of only 5/5d. In the counties of cities the lowest was 7/5d. in Edinburgh and the highest 13/11d. in Glasgow. The standard deviation was 39.57 for the county boroughs and 18.60 for the 20 large burghs. A certain caution must be exercised in interpreting these measures because of different circumstances obtaining in the different sets of figures. In the first place there are more observations in the case of the county boroughs than for the other authorities; the number for the counties of cities (4) has been regarded as being too small for the Standard Deviation and co-efficient of Dispersion to be meaningful in comparison with the 83 county boroughs and has therefore been omitted. Secondly, the arithmetic averages about which the / -

the dispersions have been measured are somewhat different, e.g., in 1938/39 in the case of the county boroughs it is 168d. while it is 134d. in the large burghs. In order to make the measure of dispersion more comparable a co-efficient of dispersion is therefore used which is the standard deviation divided by the arithmetic average. This also enables the figures for the different years to be compared with one another. Allowing for all these factors, it still remains true to say that the "problem of the widely differing rate poundages" was not as acute in the counties of cities and large burghs of Scotland as it was in the English county boroughs.

The explanation of this may lie in the fact that rateable values per head of population in Scotland were not so widely divergent as those in England (see Table 12).

Table No.12.

Rateable Values Per Head.

	Lowest R.V. per Head	Highest R.V. per Head	Range	Standard Deviations	Co-efficient of Dispersion
1938/39					
83 County Boroughs	3.55	16.15	12.60	2.35	32.50
20 Large Burghs	5.600	10.000	4.400	1.301	17.58
4 Counties of Cities	8.700	13.000	4.300		

It is generally recognised that the state of valuation in Scotland / -

Scotland was better than that in England; valuations in Scotland in the case of houses being based on the rent actually passing and being revised each year were thus kept more up to date than those which obtained in England where in certain areas revaluations had not taken place for many years.

By 1947/48 the year prior to the introduction of the Exchequer Equalisation Grant, the dispersion of rate poundages in the County Boroughs had reduced somewhat (Co-efficient of Dispersion 17.83) while that in the large burghs remained much the same (Co-efficient of Dispersion 14.16). It is noteworthy that the dispersion in the 83 county boroughs on actual rates basis for 1947/48 is considerably less than that shown on true rates basis in the Working Party Report[1] although for 1949/50 actual rates and true rates give much the same result (Table 13).

Table No. 13 / -

1. Op. cit.

Table No. 13.

Actual and "True" Rate Poundages of County Boroughs - 1947/48 and 1949/50.

	Lowest Rate	Highest Rate	Range	Arith. Average	S.D.	Co-efficient of Dispersion
1947/48						
Actual Rates	132	360	228	223	39.75	17.83
"True Rates"	132	480	348	223	49.90	22.38
1949/50						
Actual Rates	138	300	162	219	28.	12.8
"True Rates"	145	313	168	226	30.72	13.60

The difference in the 1947/48 figures may arise from adjustments which the Working Party may have made in connection with transferred services but sufficient information as to the complete basis on which their true rates were arrived at is not given to enable me to say. On an actual rates basis, however, the reduction in the dispersion from 1947/48 (Co-efficient of Dispersion 17.83) to 1949/50 (Co-efficient of Dispersion 12.8) in the County Boroughs does not appear to be as spectacular as is generally thought to be the case.

The co-efficient of dispersion for the large burghs fell from 14.16 to 9.60 in the same period but by 1952/53 it had risen to 12.31 and by 1958/59 it was down again to 9.08. Two points are worthy of note in connection with the large burghs; firstly, for a large part of its expenditure, viz., education, the decision as to the spending is not in its own hands but is / -

is determined for it by the county council and, secondly, that from 1947 to 1953 the "proportionality principle" would not apply in relation to education expenditure allocated to the large burghs within the same county. From 1947/48 to 1952/53 allocations of general county expenditure were still made on the basis of actual rateable value but since Exchequer Equalisation Grant was paid direct to the large burghs on this expenditure the result was that a burgh with a lower rateable value per head than another would require to levy a lower rate poundage to meet its share of the education requisition since the allocation was made on the basis of actual rateable value when it had a potential rateable value equal to the standard rateable value. It may be that this was partly responsible for the increase in dispersion between 1949/50 and 1952/53 but for a conclusive explanation a much closer examination of the detail of individual services would be required.

3. County Rate.

The County Rate in Scotland is comparable to the total rate levied by the rural district council to provide for both general and special county purposes plus the rural district council's own expenditure. It excludes special district rates for sewerage, lighting, etc., levied on different parts of the county and also the district council rate and domestic water rate. In the Report of the "Working Party to investigate the effects of the Local Government Act, 1948, etc." a rate is shown in respect of county services and also in respect of county and district services. The rate in respect of county services is stated to represent the net expenditure of the county council on both general and all special accounts, spread over all districts uniformly, regardless of variations in the incidence of the county precept between one district and another while the rate for district / -

district purposes represents for each county the single uniform rate which, levied over all the districts within the county, would have produced an amount equal to the total product of these separate rates levied for district purposes. This method appears to have been followed in "Local Expenditure and Exchequer Grants".[1] What they are therefore doing is expressing a notional rate which cannot in fact exist in any particular area of the county but which might obtain if a different organisational structure obtained, viz., if the whole county was one uniform area for rating purposes. It is interesting to note that they are unconsciously altering the administrative unit in order to examine the effects of the Equalisation Grant. This is significant because, in my view, for any scheme of equalisation to be effective it is necessary that the area whose fiscal capacity is being equalised should co-incide with the area in which the burden of expenditure is being met. No comparison is therefore made between the county rate in Scotland and the "county" rate as contained in the Working Party Report.

Table14 shows the details of the dispersion of the county rate or consolidated rate as it was known prior to the Local Government (Scotland) Act, 1947.

Table No.14. /-

1. Op. cit.

Table No. 14.

Rate Poundages - Consolidated or County Rate.

	Lowest Rate	Highest Rate	Range	Arith. Average	Standard Deviation	Co-efficient of Dispersion Col.5÷Col. 4.
	(1)	(2)	(3)	(4)	(5)	(6)
	d.	d.	d.	d.	d.	%
1938/39	63	158	95	111	20.4	18.4
1947/48	101	281	180	154	33.75	21.92
1949/50	84	166	82	131	22.71	17.3
1952/53	108	248	140	187	29.3	15.7
1958/59	140	318	178	207	37.93	18.32

A word of caution is necessary in considering the county rate. Some counties have abolished special districts for such purposes as scavenging and lighting and include expenditure on these services in the county rate. It might be said that in so far as the county rate is not the only rate in the county the same criticism as I have made of the Working Party might be levied against me for demonstrating changes in the dispersion of it. In the first place, the county rate is an actual rate levied in the counties; in the second place, I am not demonstrating that in the long period there has been a significant reduction in dispersion. If there has not been a significant reduction in the dispersion of the county rates then there is not likely to be a significant reduction in the total rate including special district and district council rates except by a most fortuitous circumstance.

It / -

It is seen that the county rate in 1938/39 ranged from 5/3d. to 13/2d., a range of 8/11d., while the co-efficient of dispersion was 18.4%. This latter co-efficient had increased somewhat by 1947/48 to 21.92%, falling in 1949/50 to 17.3% and further in 1952/53 to 15.7%, but by 1958/59 it had moved up again to 18.32% - about the same as in 1938/39.

In the counties a severe impediment to equalisation is the existence of a variety of different rates. In addition to the county rate there is the district council rate, special district rates and domestic water rate. The expenditure on domestic water does not earn Exchequer Equalisation Grant. The remainder of the landward expenditure, i.e., county rate expenditure, district council expenditure and special district expenditure, earns Exchequer Equalisation Grant, all of which, apart from a proportion allocated to the District Councils pro rata to expenditure, is credited to the county rate. Now in 1959/60, for example, the domestic water rate in counties varied from 1/- in one county to 5/5d. in another. The highest total of district council and special district rates was as much as 8/6d. in one county. In the County of Lanark the county rate was 18/8d., but the highest total rate in that county was 29/10d. It is reasonable to suggest that to the individual ratepayer in the highest rated area the 11/2d. represented by the domestic water, district council and special district rates was just as important as 11/2d of his county rate. When we consider that we have the position of a county rate in respect of which more grant may have been received than is due in terms of the principle of equalisation, a domestic water rate for which no grant is paid, a district council rate in respect of which either too much or too little grant in terms of equalisation has been received, and special district rates which have received no grant but whose expenditure has helped to earn grant for the county rate, we see what an impediment this organisation of units is to equalisation.

The effectiveness of any scheme for equalisation whether this be based on rateable value per head or any other measure per head will depend upon the area whose fiscal capacity is being equalised coinciding with the area in which the burden of expenditure is being met. Put another way - to achieve proper equalisation for the district councils and the special districts a scheme of equalisation would require the fiscal capacities (in this case the rateable values per head of population) of each of these areas to be separately calculated. In view of the large number of these individual areas this would be an impossible task. The principle is important, however, because it has an obvious bearing on the proper organisation of units or areas of service if equalisation is to be achieved.

4. Conclusion.

The conclusions to be drawn from the foregoing are:-

(1) The reduction in the dispersion of the actual County Borough Rates in England since the introduction of the Exchequer Equalisation Grant has not been as great as has been generally believed;

(2) Rate poundages in the large burghs in Scotland, although they were not as widely divergent as the county borough rates in England, are now somewhat less widely dispersed than they were prior to 1948;

(3) / -

(3) The dispersion in the county rates in Scotland in 1958/59 was as great as it was in 1938/39. The existence of the many special district rates in the landward areas constitutes an impediment to equalisation;

(4) There is insufficient evidence to suggest that the Exchequer Equalisation Grant has had any marked effect on reducing the dispersion of rate poundages.

CHAPTER VIII.

The Expenditure Side.

1. Introduction.

For purposes of analysis it is convenient to distinguish between the expenditure or needs side and the income or resources side. This chapter is concerned with the expenditure side. First of all we shall try to see if there is any evidence to suggest that the Exchequer Equalisation Grant has in fact given rise to substitution effects, the possibility of which was suggested in Chapter I. Secondly we shall examine the different expenditures of local authorities in the light of certain factors which might be regarded as causing different expenditures. The object of this latter investigation is to see to what extent compensation may be required on the expenditure side so as to achieve equalisation.

In the analysis of the grant operations in this chapter, wide use is made of the calculation of correlation coefficients. It is perhaps unnecessary to underline the necessity for caution in the interpretation of these coefficients, particularly where multicollinearity is present or to point out the obvious fact that the correlation coefficient itself cannot tell us anything about cause and effect.

2. The Exchequer Equalisation Grant as a Percentage Grant.

The Exchequer Equalisation Grant expressed as a percentage grant varies from Nil to 44.8% in the large burghs and from Nil to 86.75% in the counties (landward area) as shown in Table 15. We therefore seek to see to what extent high rates of grant have tended to encourage high rates of growth of expenditure. The period chosen for examination is from 1953/54, the first year when the capitation grants were discontinued, to 1958/59, the last year prior to the introduction of the General Grant. Table 15 shows the percentage increase in estimated relevant local expenditure from 1953/54 to 1958/59 (Col.3) with the percentage rate of Exchequer Equalisation Grant (Col.4) for 1958/59 alongside.

The Counties of Cities showed an increase in expenditure per head of 56.8%, the large burghs 50.7%, and the counties 66.1% of which the Exchequer Equalisation Grant as a percentage or relevant local expenditure was 1.30%, 23.62% and 38.03% respectively. In the Counties section it is noticeable that very high percentage rates of grant are associated with high rates of growth, e.g., Zetland with a grant percentage of 86.75% shows a percentage increase in per capita expenditure of 212.7%, Orkney with 87.84% a percentage increase of 190.2% while those with low rates of grant show low rates of increase in per capita expenditure, e.g., Peebles with a nil grant percentage shows an increase of only 30.1% and Renfrew with a grant percentage of 3.30% an increase of 38.8%

Table / -

Table No. 15

	Estimated Relevant Local Expenditure per Head			E.E.G. as
	1953/54	1958/59	% age Increase	% age of R.L.E.
	£	£		
Counties of Cities				
Aberdeen	10.963	16.396	49.6	4.76
Dundee	10.058	15.363	52.7	10.10
Edinburgh	8.842	14.217	60.8	.06
Glasgow	12.038	18.933	57.3	
Average	10.967	17.200	56.8	1.30
Large Burghs				
Airdrie	12.054	17.396	44.3	39.04
Arbroath	10.083	15.125	50.0	34.01
Ayr	9.900	13.446	35.8	
Clydebank	12.283	18.746	52.6	30.65
Coatbridge	11.492	16.721	45.5	41.29
Dumbarton	10.313	15.617	51.4	26.29
Dumfries	11.158	15.688	40.6	19.42
Dunfermline	10.204	16.583	62.5	26.66
Falkirk	10.971	15.804	44.1	16.98
Greenock	10.363	14.746	42.3	25.35
Hamilton	10.892	15.650	43.7	26.70
Inverness	12.958	15.758	21.6	4.79
Kilmarnock	11.492	18.521	61.2	11.35
Kirkcaldy	9.867	18.538	87.9	25.27
Motherwell & Wishaw	10.550	15.463	46.6	28.58
Paisley	10.225	16.492	61.3	22.22
Perth	10.404	15.917	53.0	9.45
Port Glasgow	10.133	16.117	59.0	44.88
Rutherglen	11.800	18.421	56.1	19.88
Stirling	11.408	15.175	33.0	10.80
Average	10.821	16.304	50.7	23.62

Table No. 15
(contd.)

	Estimated Relevant Local Expenditure per Head			E.E.G. as
	1953/54	1958/59	% age Increase	% age of R.L.E.
	£	£		
Counties (Landward)				
Aberdeen	8.850	13.708	54.9	53.67
Angus	7.796	13.883	78.1	47.04
Argyll	9.117	17.038	86.9	52.79
Ayr	8.404	14.763	75.7	26.85
Banff	7.221	13.263	83.7	67.90
Bute	6.121	11.408	86.4	15.52
Berwick	9.033	15.771	74.6	55.90
Caithness	6.388	13.513	111.5	67.40
Clackmannan	8.717	14.788	69.6	31.32
Dumfries	10.063	13.371	32.9	42.42
Dunbarton	11.483	18.429	60.5	23.89
East Lothian	9.229	12.779	38.5	25.85
Fife	8.638	16.621	92.4	37.23
Inverness	9.104	19.846	120.2	63.19
Kincardine	7.783	13.692	75.9	56.81
Kirkcudbright	10.008	14.033	40.2	57.22
Lanark	11.917	17.196	44.3	28.20
Midlothian	9.317	14.200	52.4	29.73
Moray & Nairn				
Moray	5.363	9.296	73.3	45.28
Nairn	7.275	12.208	67.8	51.67
Orkney	4.613	13.388	190.2	87.84
Peebles	12.188	15.858	30.1	
Perth & Kinross				
Perth	7.904	12.413	57.0	36.10
Kinross	7.513	11.933	58.8	39.01
Renfrew	10.392	14.429	38.8	3.30
Ross & Cromarty	7.425	15.238	105.2	75.50
Roxburgh	7.454	14.467	94.1	47.34
Selkirk	5.766	13.654	136.8	43.45
Stirling	10.371	19.329	86.4	31.54
Sutherland	14.558	26.925	84.9	75.01
West Lothian	9.054	15.904	75.7	39.99
Wigtown	7.017	15.192	116.5	60.06
Zetland	5.592	17.488	212.7	86.75
Average	9.475	15.738	66.1	38.03

Notes (1) The figures of estimated relevant expenditure for 1953/54 and 1958/59 and E.E.G. as a percentage of relevant local expenditure are taken from "Rating Review" and are supplied by the Scottish Home Department.

(2) The averages are weighted averages.

The coefficient of correlation between Exchequer Equalisation Grant expressed as a percentage grant (1958/59) and the per capita percentage increase in relevant local expenditure between 1953/54 and 1958/59 was + .67 for the Counties and + .33 for the burghs. In the case of the counties, therefore, there is some indication that the grant acted as an incentive to spending but this does not appear to be so for the burghs. This is probably explained by the fact that in the first place the range of the percentage rates of grant is much wider in the case of the counties (Nil to 86.75%) than for the burghs (Nil to 44.8%) and in the second place a large part of the burghs' expenditure is determined for it by the decision of the county council. Thus the County is its own decision-making unit in relation to its expenditure while the burgh is not, and consequently it may be that the County's decision regarding spending is affected by its knowledge of the percentage which will be borne by the Central Government. It is also necessary to point out, however, that some of the increase in per capita expenditure may be explained by declining populations.

3. Factors associated with Differences in per capita Expenditure.

Reference was made in Ch. I to the possibility of fitting a regression equation which would express the relationship between per capita expenditure and the factors associated with differences in per capita expenditures and thereafter to use the coefficients of this equation in a grant distribution formula. With this object in mind data on per capita expenditures for the different services were collected from the Counties of Cities, the large burghs and the counties of Scotland.

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It is a necessary requirement in a statistical exercise of this kind that the observations on which the calculations are based should be "independent observations". It was immediately apparent that the total per capita expenditures of the large burghs and counties were not independent observations because a large part of the expenditure consisted of expenditure allocated on some pre-determined or arbitrary basis, e.g., standard rateable value. It became evident therefore that one had to select one's observations from expenditures incurred by the original decision-making unit responsible for incurring the expenditure, expressing these in per capita terms relating to the whole area of the authority. Now since the General Grant is calculated initially for each Education area it was therefore necessary to see what services were provided throughout that area by the Education authority (viz. the Counties of Cities, and the Counties) which might form "independent observations". The only service to which this applied was Education. It was this service therefore which I chose to investigate.

Although in one sense the exercise did not prove fruitful, nevertheless it was the process of carrying out this statistical exercise and the necessity of fulfilling its requirements which brought to my attention the interesting circumstance of which mention has already been made in Ch. V viz. that it is not possible for the General Grant distribution formula to be aimed at making allowance for any service other than Education. Since the General Grant is calculated initially for the Education area it can only take account of those services which are provided for that area by the education administrative unit and as has been indicated, the only service / -

service in Scotland to which this refers is Education.

I feel this point is of particular importance for it is one about which the Central Government is somewhat sensitive. It is maintained that the General Grant is a general contribution in aid of all services and that it must not be regarded as being linked with any particular service.[1] The Government have refused to entertain representations from local authorities or local authority associations who express the general grant received by them in relation to their education expenditures. The Central Department aver that the General Grant is directed in aid of all services. This is interesting for in the writer's view, given the present structure of local government in Scotland and the present distribution of functions among authorities, it is statistically impossible to devise a formula which could be used to distribute a global sum so as to have regard to all services. As we indicated in Ch. V, to enable this to be done the Aggregate General Grant would require to be broken down for the various services, each portion being distributed directly to the units which originally incurred the expenditure. It would seem that this should be an essential principle in a scheme of equalisation, viz., that the calculation of the grant should be made separately for the decision-making units which incur the expenditure. It is interesting to note that the Minority Report of the Royal Commission on Local Taxation[2] recommended a system of block grants for individual services which were to be distributed to the authorities responsible for incurring the / -

1. Cmnd. 208, P.5., para. 11.
2. Op. cit.

the expenditure on those services.

We therefore take Education per capita expenditures in 1959/60 and test these against certain factors which might be regarded as likely to give rise to different expenditures. The factors tested include those for which weightings are included in the General and Exchequer Equalisation Grants. The first factor chosen for examination is density as measured by population per square mile. We find that the correlation is negative but not significant (- .11). It is to be expected that it should be negative in sign in that to the extent that there is any correlation it might be expected that the greater the density the less might be education expenditure per head because of economies of scale.

The next factors to be tested are those for which weightings are included in the grants. The coefficients of correlation for the ratio of scholars to population (+ .13), the ratio of children under 15 to population (- .02), population per mile of road (- .25), and pupils per mile of road (- .24) are not statistically significant.[1]

Table No. 16.

Coefficients of correlation.[2] / -

1. For tests of significance see R.A. Fisher, Statistical Methods for Research Workers, Table V - A "Values of the Correlation Coefficient for Different Levels of Significance", Oliver and Boyd, Limited, Edinburgh.

Table No. 16.

Coefficients of Correlation.[2]

			Coefficient of Correlation
Per Capita Educn. Exp. 1959/60		/Density	- .11
do	do	/Ratio of Scholars to population	+ .13
do	do	/Ratio of children under 15 to population	- .02
do	do	/Population per mile of road	- .25
do	do	/Pupils per mile of road	- .24
do	do	/Ratio of landward to total population	+ .58
do	do	/E.E.G. as %age grant	+ .67
do	do	/General Grant per capita	+ .88
E.E.G. as %age grant		/ do	+ .72
Increase in Educn. Exp. per head 1947/48 to 1957/58		/ E.E.G. as %age grant	+ .62

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2. The data from which these coefficients are calculated are shown in Appendix Table A - 3 where not otherwise given in Tables in the text.

It is interesting to note that the coefficient for the ratio of scholars to population is positive while that for the ratio of children under 15/population is minus. This difference in sign is no doubt accounted for by the different age groups and the fact that a number of children attend private schools. The coefficients for population per mile of road (- .25) and pupils per mile of road (- .24) are very similar as one would expect since there is not a wide range in the different ratios of pupils to population in the various authorities. Again the signs (-) are as one would expect.

Another factor which might have been expected to have an influence on expenditure is the political complexion of the authority. But here again the relationship was not significant. The correlation ratio between education per capita expenditure and political complexion was .2. It is interesting to note, however, that, in the case of housing relevant expenditure per head in which the deficit per head is largely determined by the rents policy of the authority, the correlation ratio between housing deficit per head and the political complexion of the county was high, viz., .82.

So far then we have found very little evidence of direct association between the factors mentioned and per capita education expenditures. We now test the ratio of landward population to total population and the result is + .58 which is higher than in previous cases. What is more significant however is that when we correlate education expenditures with the percentage rate of

E.E.G. which authorities were receiving the coefficient was + .67. In addition we find that the increase in expenditures between 1947/48 (the year prior to the introduction of the E.E.G) and 1957/58 when correlated with the percentage rates of E.E.G. the coefficient is + .62. In other words those with the highest rates of E.E.G. have increased their expenditure most and those with the highest rates of E.E.G. have the highest expenditures per head.[1]

It would seem therefore that a most important factor in determining the different expenditures of the authorities is the way in which grant has been distributed in the past and indeed that the pattern may largely be set by the way grant has been distributed. In view of the fact that over 50% of local authorities' income is derived from grant and in view of the importance of the income factor as disclosed by previous investigations[2] this might seem to be a not unrealistic conjecture. Even the correlation between education per capita expenditures and the ratio of landward to total population may be capable of explanation in the same way. The ratio of landward/total population is a measure of scatter of population, a condition which will necessitate low pupil/teacher ratios and the Education Grant which preceded that introduced at the inception of the E.E.G. contained a large element in respect of each teacher employed by the local authority. To this extent therefore the relationship between education expenditure and landward/total population may be partly due to the larger grants paid / -

1. It is necessary to point out, however, that some of the increase in expenditures between 1947/48 and 1957/58 will be due to the fall in money values.

2. S. Fabricant, Op. cit.

paid to those authorities with high ratios of landward to total population.

The case must not be overstated. It is perhaps sufficient to say that differences in expenditures are caused by an amalgam of factors, not least of which will be the income factor (in our case this will include the incomes of the ratepayers and the grant subventions from the central authority) and that conclusions drawn from a mere observation of expenditures without regard to the income factor must necessarily be suspect. If we assume that two areas are inhabited by residents of roughly the same income groups and that no grant is paid but that one is sparsely populated and the other densely populated, while the sparsely populated area would require a much higher per capita expenditure to enable it to provide the same standard of education as the densely populated area, it would in fact be unable to do so because of the limitations of income. It follows from a mere observation of expenditures that the sparsely populated area would not show an appreciably higher expenditure, the result being of course that the standard of service would be lower. Or again it might have been expected that authorities with higher than average numbers of children in relation to total population should spend more than those with less than average numbers but in the event they would not do so because of the limitations of income. This suggests that, ideally, schemes of equalisation should include an <u>assessment</u> of the amount that should be spent or the degree of allowance that should be made for the factors which need compensation. It would also seem that an equalisation grant formula such as that envisaged by Mr. Woodham and the author would not be a practical possibility. Having carried out our exercise we can see - with the aid of hind-sight - that the result / -

result is precisely what might have been expected. Part of the object of equalisation grants is to enable those authorities to incur higher expenditures which would be necessary owing to natural conditions and which otherwise would not have been attainable by those authorities owing to their income limitations.

What significance has the foregoing analysis in our attempt to assess whether the equalisation grants have achieved their purpose? It means that quite apart from any difficulties of assessment on the income side (about which we shall deal in Ch. IX), we would require on the expenditure side to establish measures for the various services which would be representative of similar standards of service having regard to different conditions under which these services are provided. This is a task beyond the possible scope of this investigation and indeed might well from the subject of a separate research study itself. It is possible, nevertheless, to give some indications about how this might be done. Cost analysis might be used. For example, in the case of Education, standard costs per pupil might be devised by allowing a standard amount per pupil for books, apparatus, etc., a standard amount for teachers' salaries based on certain pupil/teacher ratios which would require to be varied having regard to the degree of "scatter" of population, etc. We might thus build up our "necessary minimum outlay to achieve a centrally set level of performance" although it would seem that this minimum outlay would require to be different for authorities operating under such widely diverse conditions as those of the Crofting Counties and those in the Central Industrial belt. Difficult as it might be to devise these standards in terms of expenditure which would be representative of similar standards of service and which would be necessary for our second concept / -

concept of equalisation (an equalisation of fiscal capacity to provide a centrally set level of performance), it will be apparent that it is even more difficult to devise measures of need for our first concept of equalisation where the adjustment requires to be made in terms of fiscal potential.[1]

Although attention has been drawn to the dangers of conclusions drawn from a mere observation of expenditures - at least for equalisation purposes - it is not suggested that such an observation of expenditures is neither useful nor fruitful. In the field of public finance we have frequently in practice to be satisfied with something less than the ideal. Other considerations, such as the avoidance of major financial disturbances in the existing positions of the local units of government, may affect our objective. When the architects of formulae come to devise a new formula they require to take the existing expenditures as they find them irrespective of how these may have emerged and then fit their formula as best they can to these. It is evident from the coefficient of correlation between Education per capita expenditures and the per capita General Grant of authorities (+ .88) that the General Grant formula is aimed at making the General Grant "fit" existing Education expenditure.[2] Since the major grant replaced by the General Grant, viz. Education, was broadly / -

1. It is understood that attempts at the definition of appropriate indexes of fiscal capacity and need have been made. See Selma Mushkin and Beatrice Crowther, Federal Taxes and the Measurement of State Capacity, Washington, Public Health Service, U.S. Department of Health, Education, and Welfare, May, 1954.

2. Vide note on p.128

broadly a percentage of Education expenditure, in order to avoid undue disturbance in the existing grants being paid an endeavour was made to produce a formula based on "objective" factors which would give each authority roughly the same percentage of its expenditure - at least initially.

The technique of correlation coefficients does not appear to be widely used by the Central Department in devising formulae. They are therefore involved in a great deal of "trial and error" before producing a suitable formula. It may therefore be pertinent to draw attention to the practical usefulness of these calculations. We have seen that the General Grant formula contains weightings for (a) the number of children under 15, (b) the ratio of pupils to miles of road, and (c) the ratio of landward to total population. Our correlation co-efficients show that of these three factors the number of children under 15 (- .02) contributes least to the making of the Grant formula "fit" Education expenditure - indeed if anything it would seem to have the reverse effect - the ratio of pupils to population appearing to be more appropriate for this purpose; although it is obvious from the low value of the correlation coefficients that neither of these factors would contribute much towards achieving the purpose in mind. The Working Party when experimenting with various factors tried doubling the numbers of children under 15 to see if this would help to achieve the objective whereas a calculation of the correlation coefficient in the first place would have shown that this would have little effect.

It is also apparent from the correlation coefficients that the

ratio of landward/total population is the most important factor in making the formula "fit". Yet during the recent investigation of the General Grant the Working Party stated their intention of dropping this factor from the formula and of so modifying Table I of the Second Schedule to the Local Government (Scotland) Act, 1958, (the weightings for pupils per mile of road) that the formula would give much the same result and they appointed a sub-committee to produce suitable formulae. In the light of these correlation coefficients I predicted that this would be impossible and in the event this proved to be the case, the sub-committee after having several attempts, being forced to revert to a modified version of Table II (the weightings for ratio of landward/total population).

Before closing this discussion of correlation coefficients I would draw attention to the relationship between the percentage rate of E.E.G. and the General Grant per head of population (+.72) from which it will be seen that in general those with high rates of E.E.G. also received high General Grant per head and those with low rates of E.E.G. low General Grant per head. This relationship again accords with what might have been deduced from the other relationships. We saw that high rates of E.E.G. were associated with high Education expenditures and since the former Education grant was broadly a percentage of Education expenditure it follows that high rates of E.E.G. would also be associated with Education grant per head and since the General Grant formula was aimed at giving authorities roughly the same grant as they were receiving under the former specific grant system it also follows that the same relationship exists between the percentage rates of E.E.G. and per capita General Grant.

CHAPTER IX.

The Income Side.

1. Introduction.

If in the wider field of public finance the concentration of study has been on the income side to the neglect of the expenditure side the reverse has been the case in studies of the Exchequer Equalisation Grant. Such researches as there have been have produced much by way of comparative statistics of expenditure but nothing about relative incomes in the different regions.[1] This may have been due to the lack of available statistical data on regional incomes in this country. Nevertheless there has also been a failure to examine the conceptual basis of income for equalisation purposes.

The most frequent method of dealing with this problem has been to assume that rateable value is a reliable measure or at least an indicator of the wealth of an area and then to proceed with an examination of the other aspects of the research. In my view this is one case where a process of "contracting out" is not permissible because if, as I believe, the income factor is such an important one in determining expenditures, no useful conclusion may be drawn from an examination of expenditures without some knowledge of incomes. In this chapter, therefore, I shall first

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1. J.R. and Ursula Hicks, Standards of Local Expenditure, Op. cit.
   The Effects of the Local Government Act, 1948, and other recent Legislation on the Finances of Local Authorities, Accounting Research Vol. II, No.3, July, 1951.
   Local Expenditure and Exchequer Grants, Op. cit.

of all discuss some of the factors which have contributed to the view that rateable value may be regarded as a measure of the prosperity of an authority, secondly I shall endeavour to provide a satisfactory concept of the taxable capacity or resources of an area, and finally I shall consider what available information there is with which to measure these resources.

2. Rateable Value as an Indicator of Capacity to pay.

Unlike the income tax which is a comparative newcomer, the property tax is one of the oldest of our tax institutions. The origins and history of the tax provide an interesting commentary on the influence of contemporary economic ideas on the tax system. In medieval times before the advent of a developed monetary system it is natural that property or real assets should belooked to as the base of taxation. Later the Physiocrats with their idea that only land yielded a "net product" and consequently that this surplus received as rent by the landlords should be the source of all taxation lent strength to the view that property should be the subject of taxation.

Ricardo in endeavouring to explain the causes of value tried to show that the value of goods depended on the amount of labour involved in production and attempted to apply this principle to the various agents of production. The subsistence wage was held to be the cost of production of labour. Interest, being the inducement to people to abstain from present consumption, was looked on as the cost of production of capital or the reward to past labour. Difficulties, however, / -

however, were encountered in applying this notion to the return to land. Ricardo's explanation was that "rent" represented the return over and above the costs of production on marginal lands. Rent was the result of price and not the cause of it. It represented the only true surplus. Against the background of such economic thought it is not surprising that rent should be regarded as the measure of capacity to pay.

With the development of modern concepts of income as a flow of real goods and services measured in money terms it was necessary to obtain a more satisfactory justification for contending that rateable value could be regarded as a measure of ability to pay - one which would be consistent with current ideas about income. This argument would seem to run as follows. If we assume a hypothetical situation in which free market conditions apply and that there is a reasonably good supply of houses, "buyers" and "sellers" being free to strike bargains over rents, then it will be possible for anyone to choose a dwelling which suits his purse. The rental of the dwelling chosen would in such circumstances provide a rough guide to the occupier's ability to pay[1]. As used here the expression would seem to mean "proportional to income". There is a superficial attraction about such a proposition particularly in advance of seeing how it works in practice and if one ignores the difficulty of establishing hypothetical / -

1. Local Expenditure and Exchequer Grants, Op.cit. p.25. Rating of Dwellings, History and General Survey, Op.cit. p.70. The term "ability to pay" is not sufficiently positivistic. It is capable of being interpreted as indicating a tax system which is proportional, progressive, or indeed even regressive if one has regard to the benefit aspect of taxation. In the context of this discussion the writer interprets it as meaning a "tax system where the tax imposed has some pre-determinate measurable relationship with the income of the individual".

hypothetical values in a situation which has in fact rarely existed since the 1914/18 war and certainly never since the 1939/45 war. Widespread rent control and heavily subsidised local authority housing have prevented anything in the nature of a free market in rents operating and it is difficult to see how in such circumstances assessors can set about valuing hypothetical rents. This whole approach postulates a situation which does not exist in the real world of to-day.

In introducing the Second Reading of the Bill which provided for the Exchequer Equalisation Grant (Local Government Act, 1948) Mr. Aneurin Bevan, the then Minister of Health, said - "We are not concerned primarily with the local authority; we are concerned primarily with the ratepayer..... We are concerned primarily with the individual, and what we should find out, therefore, is whether two citizens of equal substance in different parts of the country have to make an equal contribution for the same local services. That is the formula, that is the basis".[1] It was with this stated objective that the Exchequer Equalisation Grant was submitted to and justified before the House of Commons. It was immediately recognised and indeed admitted in Parliamentary debates that it could not possibly achieve this objective so long as the known lack of uniformity in rating assessments (which obtained in England particularly) persisted. On the other hand, it was fairly commonly thought that the only impediment was this lack of uniformity in assessments and that, given a new and proper revaluation, a satisfactory basis for this objective might emerge.

At / -

1. Hansard 18th November 1947: Col. 993.

At this point it may be pertinent to draw attention to a frequently made misconception as to what is meant by "uniformity" of valuation. In the minds of some it is thought to mean complete parity of value between similar properties in whatever area they are situated and that, say, a five apartment house in one area would necessarily have the same value as another identical five apartment house in another area. With a system of valuation resting upon a rental basis clearly a result of this kind is neither possible nor to be expected. Numerous factors enter into the establishment of a free market rent and these are bound to differ in emphasis and importance from area to area. A moment's reflection only is needed, therefore, to realise that uniformity even in a free rental market does not necessarily mean complete standardisation.

The realisation that this assumption of a relationship between the valuation of a house and the occupier's income was untenable has caused the protagonists of the rateable value indicator to shift their ground. For example it has been said "The first criticism of the use of rateable value per head is based upon two main grounds: (1) standards of house accommodation in different parts of the country are largely conventional, so that persons of equal substance tend to occupy houses of different standard in different areas and (2) levels of valuation are far from uniform, so that equal houses are not everywhere equally rated. The objection on ground (1) we do not dispute, but we classify it along with those local disparities in expenditure levels which we suggested in para. 8 were part of the inevitable price to be paid for local democracy. Local taxation must be allowed its idiosyncracies."[1] This statement might be acceptable in a situation which did not postulate equalisation but as an expression of view by

a/ _

1. The Effects of the Local Government Act, 1948, and other Recent Legislation on the Finances of Local Authorities, Part 5, p.8, para 12. The italics are mine.

a Research Committee appointed to investigate the Exchequer Equalisation Grant it is an evasion of the whole issue, namely, that the objective is equalisation. While "local idiosyncracies" may be permissible under some circumstances it is not logical, given equalisation as an objective, to admit these anomalies on the one hand and yet to contend that a scheme which is based on anomalies can achieve a meaningful concept of equalisation.

Another and more frequent justification for the use of rateable value is to draw a distinction between the resources of an authority and the individuals contained within the area of the authority, admitting that valuations are not an indicator of individual incomes but that they are representative of the taxing resources of the authority. It will be noted that such a distinction has frequently been made throughout the history of equalisation grants and while it was not made at the time the Exchequer Equalisation Grant was introduced it has re-emerged frequently since then in writings and official pronouncements about the object of the Exchequer Equalisation Grant. In 1952 the Minister of Housing and Local Government (in the Conservative Government) stated the objectives of the Exchequer Equalisation Grant in terms very different from those used on its introduction.

"The Equalisation Grant looks not to the resources of the individual but to the resources of the local authority and is designed to come in relief when those resources are below the average for the whole country".[1]

Further / -

1. Paper given by Minister of Housing & Local Government, Annual Conference I.M.T.A., 1952.

Further official expression of this view was given in the Ministerial paper setting out the terms of reference of the Committee "to Investigate the Operation of the Exchequer Equalisation Grants in England and Wales"[1] and dealing in detail with the origin and scope of the investigation -

"These (equalisation) grants start from the basis that rates are the only taxable resources at present available to local authorities. These resources may be lower than they might otherwise have been by the conscious act of the local authority or by derating or for any other reason but - whatever the cause - the local authority is handicapped if its rating resources are less than the average. It is inhibited from applying higher poundages to low assessments by the need to keep its rates within the band of rate poundages accepted as reasonable at that time in the region of the country."

It is difficult to discern in this statement an exposition of a fundamental purpose for the Grant but only an explanation of what it does. If rateable value is accepted as a measure of resources, the statement is, of course, a perfectly accurate description of what the Grant does but it leaves unanswered the fundamental question of whether in fact rateable value is a measure of resources. Inherent in the Ministry's statement is an assumption that what matters is "rate poundages" rather than the "rate bill" and that most local authorities with / -

1. Investigation into the operation of Exchequer Equalisation Grants to Local Authorities in England and Wales, Cmd. 9270, 1954.

with rateable value below the average will choose to have standards of local services below the average rather than rate poundages well above it. The opposing view to this is that what matters is not rate poundage but the rate bill and that there is no more ratepayer resistance to levying a rate of £2 on a valuation of £10 than there is to levying a rate of £1 on a valuation of £20. The I.M.T.A. Research Study, while admitting the difficulty of obtaining firm evidence on which to base conclusions on these opposing views,[1] favours the Ministry view.

My view is that the truth may lie somewhere between these opposing views. Primarily what must be considered is the rate bill but it would be wrong to say that rate poundages are entirely unimportant. This arises because of the interconnection between rate poundages and rents which would be paid in a free market. When a buyer is considering what rent he would be prepared to pay he will have regard to his total outlays including rates. Thus in considering the rent which a buyer would give for two alternative houses, assuming that all other things are equal, he would be prepared to give less rent for a house in an area with a high rate poundage than one in an area of low rate poundage. This applies also to property values in high and low rated areas. This leads us into difficult questions regarding the ultimate incidence of rates. What has been said about the interconnection between rent and rates viewed against the fact that over one-third of all dwelling houses in Scotland consist of local authority houses will also make evident how difficult the task must be of assessors to value houses on the basis of hypothetical rents.

3. / -

1. Local Expenditure and Exchequer Grants, Op.cit. p.30.

3. Conceptual Basis of an Authority's Resources.

In endeavouring to obtain a satisfactory conceptual basis for determining the resources of an authority we start from the basic assumption that in general taxes, although they may be levied on property or things, are ultimately payable out of the income of individuals or corporate bodies. Income may be regarded either as a flow of goods and services to the individual during a specified period of time - measured in terms of money values or prices - or alternatively as the maximum amount of real goods and services that may be consumed over a period of time without reducing the value of real capital. The first of these definitions is generally referred to as the "flow" concept and the second the "accrual" concept. In many cases both defintions come to the same thing but I shall adopt the first definition which is an extension into the field of taxation of the standard concept of income used in national or economic accounting.[1]

The equalisation plans discussed in this thesis are not primarily concerned with vertical redistribution of incomes. The aim is redistribution on a geographical basis so that individuals will not be penalised in relation to local taxes and services because of residence in areas of different income distribution. While the income redistribution resulting from these equalisation plans may have both vertical and horizontal effects the primary object is to neutralise the effect of different geographical income distributions on the local tax system. It follows, that the measure of taxable capacity for the local unit of government will depend upon the nature of the local tax system, e.g., whether it is proportional, progressive or regressive.

If / -

1. The definition of income presents many difficulties but these need not concern us here. Vide Henry C. Simons, Personal Income Taxation - The Definition of Income as a Problem of Fiscal Policy, University of Chicago Press, 1938.

If the tax system is proportional to income then income per head will be the measure of capacity and rateable value per head may be measured against it. It will be remembered that the formulae provided in Ch. I were suitable only where the tax was proportional to income.

Suppose, however, that the tax system is progressive, each area applying the same degree of relative progressiveness, then in order to neutralise the effect of different income distributions we require for tax purposes to provide each authority with the same income distribution structure.

For purposes of exemplification let us take a simple if somewhat unreal example. Suppose the system comprises three authorities who operate a highly progressive system of local income tax for three ranges of income as follows -

Example

Incomes	1. No. of Taxpayers	2. No. of Taxpayers	3. No. of Taxpayers	Total No. of Taxpayers
Highest Range	200			200
Middle Range	100	200		300
Lowest Range		100	300	400
	300	300	300	900
Population	1,200	1,200	1,200	3,600

Now the average per capita tax base is obviously -

$$\frac{200}{3600} \; / \; -$$

$$\frac{200}{3600} \text{ (Highest Range)} + \frac{300}{3600} \text{ (Medium Range)} + \frac{400}{3600} \text{ (Lowest Range)}^{1}$$

$$= .055 \text{ (Highest Range)} + .0833 \text{ (Medium Range)} + .11 \text{ (Lowest Range)}$$

The following formula may be used to adjust the tax bases -

$$(\bar{B}^{I} - B_i^{I}) + (\bar{B}^{II} - B_i^{II}) + (\bar{B}^{III} - B_i^{III})$$

where B^{I} = per capita tax base (highest range)

B^{II} = do do (medium range)

B^{III} = do do (lowest range)

Authority 1.

$$\text{Per Capita Adjustment} = \left(\frac{200}{3600} - \frac{200}{1200}\right) + \left(\frac{300}{3600} - \frac{100}{1200}\right) + \left(\frac{400}{3600} - 0\right)$$

$$\text{Total Adjustment to Tax Base} = 1200(.055 - .166) + 1200(.083 - 0) + 1200(.11 - 0)$$

$$= -133\tfrac{1}{3} + 0 + 133\tfrac{1}{3}$$

Authority 2.

$$\text{Per Capita Adjustment} = \left(\frac{200}{3600} - 0\right) + \left(\frac{300}{3600} - \frac{200}{1200}\right) + \left(\frac{400}{3600} - \frac{100}{1200}\right)$$

$$\text{Total Adjustment to Tax Base} = 1200(.055 - 0) + 1200(.083 - .166) + 1200(.11 - .083)$$

$$= +66\tfrac{2}{3} - 100 + 33\tfrac{1}{3}$$

Authority 3. / -

1. This may alternatively be stated in terms of income for the different ranges instead of taxpayers.

Authority 3.

$$\text{Per Capita Adjustment} = \left(\frac{200}{3600} - 0\right) + \left(\frac{300}{3600} - 0\right) + \left(\frac{400}{3600} - \frac{300}{1200}\right)$$

$$\text{Total Adjustment to Tax Base} = 1200 \times .055 + 1200 \times .083 + 1200(.11 - .25)$$

$$= 66\tfrac{2}{3} + 100 - 166\tfrac{2}{3}$$

	1			2			3			
	Original Tax Base	Adjustment	Adjusted Base	Original Tax Base	Adjustment	Adjusted Base	Original Tax Base	Adjustment	Adjusted Base	Total
Range -										
Highest	200	- $133\frac{1}{3}$	$66\frac{2}{3}$	-	+ $66\frac{2}{3}$	$66\frac{2}{3}$	-	+ $66\frac{2}{3}$	$66\frac{2}{3}$	200
Middle	100	-	100	200	- 100	100	-	+ 100	100	300
Lowest	-	+ $133\frac{1}{3}$	$133\frac{1}{3}$	100	+ $33\frac{1}{3}$	$133\frac{1}{3}$	300	- $166\frac{2}{3}$	$133\frac{1}{3}$	400
	300	-	300	300	-	300	300	-	300	900

Thus each authority is provided with the same tax structure per head of population.

It follows that, for a progressive or regressive tax, we require not one measure of capacity to pay such as income per head, but a series of standards for each of the different ranges of income subject to different progressive or regressive rates of tax. It is possible / -

possible for an authority to be above the standard for one range and below the standard for another range of income depending upon the income distribution structure of the area. It will be appreciated, therefore, that with a progressive or regressive tax the difficulties of measuring our standard of taxable capacity are much more formidable than for a proportional tax although it is not impossible - conceptually at least - to devise such standards. Where a tax, however, has no definite measurable relationship with the income of the taxpayer there can be no satisfactory standard of income whereby the tax base of the authority can be equalised.

It should be noted what may happen if we use income per head as our measure of capacity for a purely redistributional scheme when in fact the tax system is regressive. Suppose we have two areas A and B: Area A with a relatively large number of taxpayers in the high income group and a relatively small number in the low income group and Area B with a small number in the high income group and a large number in the low income group. Area A would have a higher per capita income than Area B and consequently income would fall to be transferred to Area B and to be financed by the taxpayers in Area A via their regressive tax. Low income groups in Area A would be helping to subsidise in Area B not only those in the same income group as themselves but, since the tax is regressive, there would be the possibility of their contributing also to the high income groups in Area A.

If regional areas tended to be occupied either solely by high income groups or solely by low income groups this difficulty might not trouble / -

trouble us but it is known that this is not so. Phyllis Deane has shown that, as measured by the "coefficient of concentration", not only is there inequality in income as between regions but also that in areas of high average assessed income there tends to be great inequality in the distribution of incomes.[1] Of course, if the income distribution were in fact such that areas of high average assessed incomes were inhabited by high income groups only and areas of low average assessed incomes by low income groups only, there would be no room for a progressive or regressive tax system in these areas.

It would seem, from the foregoing, that where the local unit of government is restricted in its tax resources to one particular type of tax system there is a sense in which a distinction may be drawn between the resources of the authority and the individuals within its area. There has, however, in previous researches, been a failure to follow this through to the necessary and ultimate connection which must exist between the resources of the individual and of the authority. This, in turn, has been due to a failure on the part of these writers to distinguish clearly in their minds the alternative approaches to the theory of government finance. As Buchanan has pointed out, the pure theory of government finance may rest on two opposing theories of the state.[2] In the "organismic" theory the state, including all individuals within it, is regarded as an organic entity. In the other approach, the "individualistic" one, the state is regarded as the sum of / -

1. Phyllis Deane, "The Geographical Distribution of Assessed Incomes", The Economic Journal, June 1953, pp. 477-482. The coefficient of concentration represents the ratio between (a) the area enclosed by the Lorenz curve and the diagonal of perfect equality and (b) the whole area between the diagonal of perfect equality and the two sides of the square which give the limiting position of perfect inequality.
2. J.M. Buchanan, "The Pure Theory of Government Finance: A suggested Approach", Journal of Political Economy LVII (Dec.1949), 496-505, reprinted in "Fiscal Theory and Political Economy", University of North Carolina Press, 1960.

of its individual members acting in a collective capacity. While neither of these approaches to the theory of government is completely appropriate when applied to all problems in public finance, nor indeed to different aspects of one particular problem, a recognition of these two fundamental concepts of government would have prevented these writers from drawing the legitimate distinction between the resources of the individual and the authority without at the same time appreciating the necessary connection between the resources of these two.

It is evident, therefore, that a prerequisite for devising any scheme of equalisation must be knowledge of the nature of the tax system or the relationship between the tax and the income of the individuals subject to the tax. If the tax imposed were a poll tax there could obviously be no question of a scheme of equalisation. Again supposing we had a tax system in which only the first £500 of individuals' incomes was subjected to tax then if the minimum income per taxpayer in each area were £500 no equalisation scheme would be called for. If, however, the tax imposed initially has no definite measurable relationship with the income of the individual then it is not possible to evolve a measure of the taxable resources of the authority in such a way as to achieve any meaningful form of equalisation. It is also evident that for equalisation schemes such as are under discussion here there is no room for the use of broad indicators of capacity to pay which may be suitable for other purposes, for the concept of the taxable capacity of an authority can only be determined in the light of its tax system. The use of broad indicators of capacity to pay may result in bringing about a greater / -

greater distortion of the tax bases than if no adjustment had been attempted. As has been indicated, the purpose of these re-distributional schemes is not to transfer income from areas of high income to areas of low income per se but merely to adjust the tax bases of the different areas so as to place all individuals, regardless of their income group, in the same position in relation to local taxes in whatever area they may choose to reside.

Under the rating system as operated in this country the property tax is levied on the occupier of property, whereas normally a property tax is levied on the owner. If the tax were payable by owners[1] then there would be some logical basis for using rateable value per head as the measure of taxable capacity of an area and for the Exchequer Equalisation Grant formula, in that it would place all owners of property in the same position in relation to local taxes irrespective of the area in which their property was situated. This relationship between the tax and the owner does not exist and since there is no measurable relationship between the tax on the value of the property occupied and the income of the ratepayer, it is not possible to devise a satisfactory conceptual basis for measuring the resources of the rating authority. Although this is evident on a priori grounds nevertheless I shall compare rateable values and incomes in different regions to see if there is any observable relationship between them.

4. Regional Incomes and Rateable Value per head.

The 105th Report of the Commissioners of Inland Revenue for the / -

1. The extent to which it may be passed on to occupiers is ignored here.

the year ended 31st March 1962 (Cmnd. 1906) Tables 135 and 136) gives details of personal incomes for tax purposes (1959/60) for 16 regions in Scotland classified under 17 income ranges. The allocation to counties and regions is based on the place of main assessment of each person which is generally the place of business or employment. Ideally for our purpose income should be on place of residence. The figures must therefore be treated with caution because of the problem of "commuters". For example, many people who work in Glasgow (Lanarkshire area in the tax returns) live in Dunbartonshire, Renfrewshire and Ayrshire. This applies particularly to the higher income groups. The Forces, Merchant Seamen and most Civil Servants are assessed centrally and are therefore not included in the regional or county figures.

If we assume for the moment that rateable value is proportional to income then our standard should be income per head. The nearest which we can get to this is the average assessed income from all sources per taxpayer. This latter figure makes no allowance for non-earners such as the unemployed, married women and children. To take the total assessed income for the region and divide by the population so as to arrive at a figure per head of population would be less accurate, however, since, because of the "commuters" problem, the total assessed income shown for a region does not relate to the actual resident population of that region.

The average assessed income per taxpayer in Scotland was £675 as against £740 for England and Wales or 91% of that for England and Wales. We cannot test these figures against rateable value per head / -

head because valuations in the two countries are not comparable and also because the basis on which the aggregate grant for the two countries is calculated is not related to rateable value. Scottish total grant from Exchequer Equalisation Grant and General Grant per head was £12.794 as against £10.652 for England and Wales, or 120% of that for England and Wales. If we are prepared to say that Scotland's needs on the expenditure side are probably greater than those of England and Wales, the grant for the two countries might be considered to be broadly in the correct relationship.

Turning now to within Scotland itself, the rateable value of authorities may be classified into the following categories -

(a) dwelling houses or domestic properties;
(b) shops and commercial properties;
(c) industrial premises.

Since the incomes we are dealing with are personal incomes we shall test the rateable value of demestic subjects per head of population against these. Figures of rateable value for the different valuation areas for 1961/62, the first year of revaluation, have been provided by the Central Department. These have been grouped to coincide with the 16 regions in the Commissioners of Inland Revenue Report and then expressed per head of population. The limitations of taking larger regional units for comparison will be evident when one has regard to the fact that within these regions there exist many smaller units for which no information is available on incomes. To make a correct assessment for equalisation purposes it is necessary to be able to measure the resources of each area which is the subject

of / -

of separate fiscal treatment.

Table 17 shows the rateable value per head (domestic subjects) in descending order of value with the average assessed income per taxpayer alongside (rankings are given in brackets).

Table No. 17. / -

Table No. 17.

	R.V. per capita - Domestic Subjects.	Average Assessed Income per Taxpayer.	
	£	£	
1. Midlothian	12.513	706.5	(1)
2. Dunbarton	11.846	656.9	(11)
3. Fife	11.575	657.4	(10)
4. Angus & Kincardine	10.700	689.8	(3)
5. Renfrew	10.625	686.1	(4)
6. Berwick, East Lothian, Peebles, Roxburgh and Selkirk	10.371	689.9	(2)
7. Perth	10.354	670.4	(7)
8. Ayr	10.183	653.5	(12)
9. Argyll and Bute	10.142	645.5	(16)
10. Clackmannan and Kinross	9.563	666.7	(8)
11. Stirling	9.471	658.1	(9)
12. Lanark	9.317	677.4	(6)
13. Aberdeen, Banff, Moray and Nairn	9.183	645.7	(15)
14. Dumfries, Kirkcudbright and Wigtown	8.425	677.9	(5)
15. West Lothian	8.142	652.0	(13)
16. Caithness, Inverness, Orkney Ross and Cromarty, Sutherland and Zetland	6.300	646.0	(14)

It / -

It is seen that rateable value per head varies from £6.3 to £12.513 while the average assessed income per taxpayer ranges only from £645 to £706. Obviously there can be no significant linear correlation. The rank correlation co-efficient (Kendall's) is .33 and is just barely significant[1]. Rateable value, therefore, is not proportional to income.

Although initially we assumed for the purposes of the foregoing investigation / -

1. The rankings are 16, the value of S observed is 40 and accordingly

$$\mathcal{T} = .33$$

$$\sigma^2 = \frac{1}{18} n (n - 1) (2n + 5)$$

$$\sigma^2 = \text{Var } S = \frac{1}{18} (16 \times 15 \times 37) = 493.3$$

$$\sigma = 22.211$$

For S corrected for continuity we have the value 39 and thus

$$S \text{ (corrected)} = \frac{39}{22.211} \sigma$$

$$= 1.75 \sigma$$

From Appendix Table 3 - M.G. Kendall "Rank Correlation Methods" it is seen that the probability of a deviation less than 1.75σ is about .9599. The probability that 1.75 is obtained or exceeded in absolute value is thus about 2(1 - .9599) = .08. This is small but not very small. It has a higher than 5 per cent probability level. It is suspected therefore that the observed value of $\mathcal{T}$ is significant but no very definite conclusion can be reached.

investigation that rates were proportional we know in fact that in broad aggregate terms they tend to be regressive. They form a larger proportion of the incomes of the lower income groups than of the higher income groups. A possible approach might therefore be to concentrate our investigation on the lower income groups in the different regions and to disregard the higher income groups. This requires some investigation of the income distribution structure of authorities.

The modal income group for the U.K. is £500 - £599. This is also the modal income group for Scotland and for all the regions under discussion except for Stirling where the modal income group is £600 - £699. On the basis of the modal income group little equalisation would be required.

Table 18 shows for the different regions the average assessed income per taxpayer for (1) incomes up to and including the modal group, (2) incomes up to and including the group £900 to £999, and (3) incomes up to and including the £900 to £999 group but including in the £900 to £999 group all incomes above £999.

Table No. 18. / -

Table No. 18.

Average Income per Taxpayer.

	Up to and including the Modal group		Up to and including the £900-£999 group		Up to and including the £900-£999 group but assuming all incomes above £999 to be £950	
Aberdeen, Banff, Moray and Nairn	403	(5)	509	(12)	554	(12)
Angus and Kincardine	397	(10)	531	(9)	581	(9)
Argyll and Bute	383	(16)	488	(16)	542	(16)
Ayr	400	(7)	530	(10)	575	(10)
Berwick, East Lothian, Peebles, Roxburgh and Selkirk	400	(8)	498	(14)	554	(13)
Caithness, Inverness, Orkney, Ross and Cromarty, Sutherland and Zetland	393	(14)	499	(13)	499	(14)
Clackmannan and Kinross	385	(15)	547	(6)	585	(8)
Dumfries, Kirkcudbright, Wigtown	401	(6)	513	(11)	563	(11)
Dunbarton	407	(3)	556	(2)	596	(3)
Fife	411	(2)	554	(5)	590	(6)
Lanark	394	(13)	544	(7)	590	(5)
Midlothian	397	(9)	534	(8)	588	(7)
Perth	397	(11)	495	(15)	542	(15)
Renfrew	396	(12)	556	(4)	606	(2)
Stirling	404	(4)	556	(3)	591	(4)
West Lothian	417	(1)	577	(1)	612	(1)
Scotland	398		536		582	

Tables / -

Tables 17 and 18 demonstrate the very different rankings, which are obtained depending upon which income group is chosen as the standard of income. For example, Midlothian which occupies first place in Table 17 moves down into 9th, 8th and 7th place respectively for the three lower income groups shown in Table 18. Berwick, etc., which ranks second in Table 17 has a ranking of 8, 14 and 13 respectively in Table 18. On the other hand West Lothian which ranked 13th in Table 17 moves into first place for each of the three groupings in Table 18. These changes in rankings arise because of the different regional income distribution structures. The different rankings obtainable depending upon the particular income group chosen illustrate the importance of what has already been said about the necessity for knowing the initial relationship between the tax system and the incomes of the individuals subject to it.

As regards the non-domestic subjects, what can be said about the relationship between their rateable value and the profits or income of the firms? The fundamental difficulty about the rating system is, as we know, that the amount payable in rates is not dependent on profits. It is well-known that rates form a much larger proportion of the income or profits of some businesses than other, e.g., a shipbuilding firm as against a bookmaker or commission agent. As far as the individuals resident in the area of an authority are concerned it might well be argued that they would be at a disadvantage vis a vis those in another area if there were not a sufficient proportion of rateable value in respect of non-domestic subjects in their area. To this extent a case might be made out for providing such areas with at least average rateable value per head in respect of non-

domestic / -

non-domestic properties.

It follows from the foregoing that with a tax system such as the rating system it is not possible to evolve a satisfactory concept of resources for equalisation purposes. A non-personal tax such as a property tax or an indirect tax is not a function of personal incomes. It is related to the value of things. Only where the base of the tax is the income received by the individual or family unit is it possible to adjust the tax base so as to equalise for tax purposes the income distribution structure of different regional areas.

CHAPTER X.

CONCLUSION.

Evaluation of the success of the policy of equalisation has been made difficult by the lack of information about the precise objectives[1] of equalisation and by the conflicting expressions of opinion at Government level as to the result which the Exchequer Equalisation Grant was intended to achieve. To overcome this difficulty I have therefore to some extent been compelled to provide my own interpretation of what is meant by equalisation and thereafter to examine whether it has been achieved or whether it is capable of achievement within the present framework.

The conclusion has been reached that in the context in which equalisation has been here interpreted no real form of equalisation can be attained based on the rating system. In any scheme of equalisation account must be taken both of the "needs" and of the resources or taxable capacity of the authority. Essentially therefore / -

1. For a similar criticism see Report of Working Party on the Formula for the Distribution of the General Grant, Society of County Borough Treasurers, 1962:-

> "We think we should, at an early point in this report, draw attention to a major difficulty under which our investigation has been carried out. We do not know why the various factors in the formula were adopted, why the factors take the form they do nor the basis on which weightings of the various factors are determined. We feel that had information of this nature been made available by the Ministry in, say, the White Papers published on the general grant, criticism and comment on the formula would have been better informed. In the absence of such details, any criticisms of the formula which arise from our investigation cannot be as constructive as we would wish them to be".

therefore the problem is one of devising, in quantitative terms, suitable measures of need on the one hand and of taxable capacity or "ability to pay" on the other. "Ability to pay" connotes some functional relationship between the tax and the incomes of those subject to it and in as much as the amount paid in rates is not related to incomes it is not possible to devise a quantitative measure of taxable capacity suitable for equalising "ability to pay". The concept of equalisation is based on ideas of equity and whatever other attributes the rating system may have, in terms of conventional definitions of equity it has little to commend it.

This suggests that if equalisation is a desired objective either (1) the tax base of local authorities requires to be altered to one more closely related to the incomes of those subject to the tax or (2) the major functions of local authorities which are of a national character should be transferred to or wholly financed by the central government. Even if the local tax system were to be altered to a local income tax the present structure of local government with its widely varying sizes of administrative units presents difficulties in the way of achieving equalisation. It is unlikely, however, in view of already expressed Government policy that anything in the nature of a local income tax would be acceptable in this country. It would seem therefore that the solution must lie in a re-examination and re-definition of the functions of local authorities accompanied by a re-organisation and simplification of local government based on larger administrative units. The whole basis of distribution of government grants in this country has become so complicated that even among those who are engaged in / -

in local finance - officials and members alike - there are relatively few who fully understand its workings.

It would be idle for me to suggest a specific scheme of re-organisation of local government based on the results of a study such as this for there are many other factors which require to be considered in any such re-organisation, the most important of which is the role which we expect local or regional government to play in this country. It is hoped, however, that when this re-organisation does take place it will not be left entirely to the administrators to determine its form for no re-organisation of local government is likely to be successful without adequate consideration being given to the financial aspects involved. Indeed, it would seem that any re-organisation of the finance of local government would best be undertaken as part of a review of the national system of public finance and taxation.

Appendix No. 1

Note on Musgrave's formulae for equalisation [1]

In Musgrave's formulae the following symbols are used:-

n = number of states

T_i = taxes collected by ith state, in dollars

S_i = subsidy (+ or -) received by the ith state, in dollars

A_i = total dollar outlay by the ith state

N_i = index of need in the ith state

t_i = tax rate in the ith state

t_c = tax (+) or subsidy (-) rate of central government required to clear the central budget

t_s = standard rate

B_i = tax base of ith state

m = minimum outlay per unit of need

Use of bars indicates averages

Musgrave's formulae would succeed in equalising the tax bases, expenditures, etc., of the 50 states without regard to the differing populations in the states. Obviously there would be little point in equalising the tax bases of say two states, one of which had half the population of the other. The approach should therefore be in per capita terms. "Per capita" is mentioned only once in Musgrave's paper (p. 99) where it is stated:-

"Plan I. A first and rather primitive approach to equalisation is one where the central government equalises actual <u>per capita</u> dollar outlays on state services in all states .....

Since/

1 R.A. Musgrave op. cit. p. 98.

Since it is the object of central government policy to equalise the outlay A_i in all states, it must meet the condition $A_i = \frac{\sum_i A_i}{n}$.

But this would be to equalise total dollar outlays per state not per capita dollar outlays. For Musgrave's formulae to achieve the desired result it is necessary to alter the definition of the above symbols to be read in per capita terms as is done on page 7 of this thesis, and to add the symbol p_i = population of ith authority. Also the use of bars should indicate weighted averages, e.g.:-

$$\bar{B} = \frac{\sum_i (B_i p_i)}{p_i}$$

The important point to note is that in dealing in per capita terms it is not sufficient to take a straight arithmetic average of the per capita items in order to obtain our average per capita term.

Example

	Total Tax Base	Population	Per Capita Tax Base
A.	£ 200,000	500	£ 400
B.	180,000	600	300
C.	400,000	800	500
D.	770,000	1,100	700
	£1,550,000	3,000	£1,900

The arithmetic average = $\frac{1,900}{4}$

= £475

but

The average tax base = $\frac{1,550,000}{3,000}$

= £516.66

Appendix No. 2

3rd Provisional Calculation 1959/60

Computation of Total Grant for Scotland

England and Wales (excluding London)	
Weighted population (1959/60) (Note 1)	52,015,001
Population (Mid. 1959)	42,185,000
Relevant local expenditure	£625,142,789
Rate deficiency grants	88,708,211
Rate-borne expenditure	£536,434,578
Scotland	
Weighted population excluding weighting for rapidly increasing population (1959/60) (Note 1)	6,633,783
Population (Mid. 1959)	5,191,660
Relevant local expenditure	£85,295,061
Less cost of collection of rates other than commission to owners and occupiers (Note 2)	490,355
	£84,804,706
Add Part V payments (Note 2)	2,274,065
Adjusted relevant local expenditure	£87,078,771

Formula

Notional R.L.E. (S) $= \frac{\text{W.P.(S)}}{\text{W.P. (Eng. and Wales)}} \times$ R.L.E. (Eng. and Wales)

$= \frac{6,633,783}{52,015,001} \times$ £625,142,789

= £79,728,185

Notional Rate-borne (S) $= \frac{\text{P.(S)}}{\text{P. (Eng. and Wales)}} \times$ Rate-borne (Eng. and Wales)

$= \frac{5,191,660}{42,185,000} \times$ £536,434,578

= £66,018,394

Notional Exchequer Grant (S) = Notional R.L.E.(S) - Notional Rate-borne (S)

= £79,728,185 - £66,018,394

= £13,709,791

Total Exchequer Grant (S) $= \frac{\text{Notional Exchequer Grant (S)}}{\text{Notional R.L.E.(S)}} \times$ Adjusted R.L.E.(S)

$= \frac{13,709,791}{79,728,185} \times$ £87,078,771

= £14,973,773

Deduct Exchequer Transitional Grant	285,424
Total Exchequer Equalisation Grant, Scotland	£14,688,349

Notes (1) For this purpose the weightings are calculated on the same basis, i.e. the Scottish weighting excluding that for rapidly increasing population.

(2) The relevant Local Expenditure is adjusted for Costs of Collection and Part V payments to make it comparable with the English relevant local expenditure.

Appendix No. 3

Minor Grants discontinued on introduction of General Grant

Applicable to England and Scotland:-

Compensation for loss of fees from the licensing of hackney carriages, trolley vehicles, etc.

Portable wheel weighters

Rodent control

Salaries, etc. of highway engineers and surveyors

Applicable to England only:-

Compensation for loss of rates on tithe rent charge

Special Welsh Grant for education

Grant in aid of the compensation to dairy farmers for destruction of infected milk

Appendix No. 4

Weightings for ratio of landward to total population and for pupils per miles of roads

(Second Schedule - Local Government and Miscellaneous Financial Provisions (Scotland) Act 1958)

Additions are made to the civilian population as follows:-

Proportion of population in landward area of county to total population	%age of population
85 per cent and over	75
Under 85 per cent and not under 75 per cent	50
" 75 " " 70 "	25
" 70 " " 60 "	15
" 60 " " 50 "	5
" 50 "	Nil

Proportion of pupils to miles of road

Under 2.5 to 1	50
" 3.0 to 1 and not under 2.5 to 1	47½
" 3.5 to 1 " 3.0 to 1	45
" 4.0 to 1 " 3.5 to 1	42½
" 4.5 to 1 " 4.0 to 1	40
" 5.0 to 1 " 4.5 to 1	37½
" 5.5 to 1 " 5.0 to 1	35
" 6.0 to 1 " 5.5 to 1	32½
" 6.5 to 1 " 6.0 to 1	30
" 7.0 to 1 " 6.5 to 1	27½
" 7.5 to 1 " 7.0 to 1	25
" 8.0 to 1 " 7.5 to 1	22½
" 8.5 to 1 " 8.0 to 1	20
" 9.0 to 1 " 8.5 to 1	17½
" 9.5 to 1 " 9.0 to 1	15
" 10.0 to 1 " 9.5 to 1	12½
" 10.5 to 1 " 10.0 to 1	10
" 11.0 to 1 " 10.5 to 1	7½
" 11.5 to 1 " 11.0 to 1	5
" 12.0 to 1 " 11.5 to 1	2½
12.0 to 1 and over	Nil

TABLE A - I

EXCHEQUER EQUALISATIO

	Weighted Population					Standard R.V.	Local Authority Houses			
	Unweighted Population (1)	Weighting for Children under 15 years (2)	Weighting for Sparsity (3)	Weighting for rapidly increasing population (4)	Total of Weighted Population (5)	(5) * 11.4294 (6)	No. of L.A. houses at 16/5/59 (7)	Notional R.V. of L.A. houses (7) * 26.558567 (8)	Actual R.V. of L.A. houses (9)	Adjustment re L.A. houses + or - (10)
LARGE BURGHS										
Aberdeen	186,796	45,219			232,015	2,651,792	17,997	477,975	475,511	+ 2,464
Airdrie	33,397	9,274			42,671	487,704	6,238	165,672	123,325	+ 42,347
Arbroath	20,146	5,094			25,240	288,478	1,571	41,724	44,547	- 2,823
Ayr	44,440	10,541			54,981	628,400	4,568	121,320	151,217	- 29,897
Clydebank	51,503	14,957			66,460	759,598	6,420	170,506	173,946	- 3,440
Coatbridge	53,754	16,585			70,339	803,933	8,527	226,465	182,337	+ 44,128
Dumbarton	26,961	7,967			34,928	399,206	3,157	83,845	84,075	- 230
Dumfries	27,780	6,864			34,644	395,960	3,786	100,551	128,500	- 27,949
Dundee	180,869	46,015			226,884	2,593,148	19,954	529,950	534,713	- 4,763
Dunfermline	46,768	11,172			57,940	662,219	4,698	124,772	132,129	- 7,357
Edinburgh	469,399	107,025			576,424	6,588,180	33,229	882,515	1,114,166	- 231,651
Falkirk	37,567	8,501			46,068	526,530	5,669	150,561	148,223	+ 2,338
Glasgow	1,076,614	280,165			1,356,779	15,507,170	110,035	2,922,372	2,803,206	+ 119,166
Greenock	78,350	21,841			100,191	1,145,123	8,543	226,890	229,169	- 2,279
Hamilton	41,612	11,435			53,047	606,295	6,429	170,745	164,110	+ 6,635
Inverness	28,562	7,328			35,890	410,201	2,782	73,886	84,177	- 10,291

TABLE A - 1 (contd.)

GRANTS 1959/60

Actual R.V. of area at 16th May (11)	Adjusted R.V. of area at 16th May (12)	Rateable Value Credited ((6) - (12)) (13)	Product of rate of £1 in £ (14)	Adjusted product of £1 in £ (15)	Relevant Local Expenditure: Landward (16)	Relevant Local Expenditure: D.C.s (17)	Relevant Local Expenditure: Total (18)	Exchequer Equalisation Grant (19)
2,544,137	2,546,601	105,191	2,514,228	2,516,692			3,536,806	141,898
276,218	318,565	169,139	274,581	316,928			584,904	203,532
195,935	193,112	95,366	192,266	189,443			295,094	98,810
658,942	629,045	-	648,880	618,983			548,281	-
570,558	567,118	192,480	555,333	551,893			979,963	253,399
463,336	507,464	296,469	458,597	502,725			934,193	346,548
317,520	317,290	81,916	303,722	303,492			461,176	98,020
345,728	317,779	78,181	349,300	321,351			434,210	84,967
2,445,442	2,440,679	152,469	2,417,745	2,412,982			2,807,113	166,831
505,093	497,736	164,483	506,605	499,248			75,317	186,684
8,188,388	7,956,737	-	8,239,180	8,007,529			6,670,640	-
457,529	459,867	66,663	460,253	462,591			629,442	79,282
16,042,054	16,161,220	-	15,611,948	15,731,114			20,956,277	-
880,176	877,897	267,226	862,139	859,860			1,165,381	276,306
445,864	452,499	153,796	441,169	447,804			660,656	168,893
399,393	389,102	21,099	396,475	386,184			476,465	24,683

6 (contd.)

TABLE A - 1 (contd.)

	Weighted Population					Standard R.V.	Local Authority Houses			
	Unweighted Population	Weighting for Children under 15 years	Weighting for Sparsity	Weighting for rapidly increasing population	Total of Weighted Population		No. of L.A. houses at 16/5/59	Notional R.V. of L.A. houses	Actual R.V. of L.A. houses	Adjustment re L.A. houses + or -
	(1)	(2)	(3)	(4)	(5)	(5) * 11.4294 (6)	(7)	(7) * 26.558567 (8)	(9)	(10)
LARGE BURGHS (Contd.)										
Kilmarnock	45,776	11,764			57,540	657,646	7,749	205,802	215,379	- 9,577
Kirkcaldy	52,407	13,320			65,727	751,220	7,355	195,338	191,111	+ 4,227
Motherwell & Wishaw	72,733	19,506			92,239	1,054,236	11,076	294,163	242,831	+ 51,332
Paisley	96,936	24,692			121,628	1,390,135	15,090	400,769	419,943	- 19,174
Perth	41,116	9,919			51,035	583,299	4,984	132,368	188,211	- 55,843
Port Glasgow	23,530	7,326			30,856	352,666	3,282	87,165	82,716	+ 4,449
Rutherglen	24,600	5,941			30,541	349,065	2,921	77,578	72,136	+ 5,442
Stirling	27,085	6,667			33,752	385,765	3,786	100,551	107,987	- 7,436
TOTAL LARGE BURGHS	2,788,701	709,118	-	-	3,497,819	39,977,971	299,846	7,963,483	8,093,665	- 130,182
TOTAL COUNTIES	2,402,959	610,160	122,845	7,610	3,143,574	35,929,156	254,535	6,760,086	6,783,015	- 22,929
TOTAL SCOTLAND	5,191,660	1,319,278	122,845	7,610	6,641,393	75,907,127	554,381	14,723,569	14,876,680	- 153,111

TABLE A - 1 (contd.)

Actual R.V. of area at 16th May (11)	Adjusted R.V. of area at 16th May (12)	Rateable Value Credited ((6) - (12)) (13)	Product of rate of £1 in £ (14)	Adjusted product of £1 in £ (15)	Relevant Local Expenditure			Exchequer Equalisation Grant (19)
					Landward (16)	D.C.s (17)	Total (18)	
611,120	601,543	56,105	600,661	591,084			812,519	70,438
593,313	597,540	153,680	590,697	594,924			933,702	191,679
809,422	860,754	193,482	801,159	852,491			1,167,906	216,037
1,144,965	1,125,791	264,344	1,118,903	1,099,729			1,446,924	280,400
583,814	527,971	55,328	577,920	522,077			679,359	65,097
204,448	208,897	143,769	201,875	206,324			344,441	141,448
280,518	285,960	63,105	279,260	284,702			452,116	82,030
360,372	352,936	32,829	357,883	350,447			459,346	39,345
39,324,285	39,194,103	2,807,120	38,760,779	38,630,597			48,190,231	3,216,327
25,009,005	24,986,076	11,411,842	24,732,084	24,709,155			37,104,830	11,468,945
64,333,290	64,180,179	14,218,962	63,492,863	63,339,752			85,295,061	14,685,272

7 (contd.)

TABLE A - I (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
ABERDEEN CO.											
Landward	98,297	25,298	7,454	-	131,049	1,497,811	4,767	126,605	142,517	-	15,912
Ballater	1,111	252	84	-	1,447	16,538	78	2,072	3,160	-	1,088
Ellon	1,436	329	109	-	1,874	21,419	176	4,674	3,892	+	782
Fraserburgh	10,372	3,011	787	-	14,170	161,955	1,367	36,306	43,981	-	7,675
Huntly	3,913	937	297	-	5,147	58,827	476	12,642	10,129	+	2,513
Inverurie	4,949	1,153	375	-	6,477	74,028	535	14,209	15,744	-	1,535
Kintore	835	212	63	-	1,110	12,687	84	2,231	2,744	-	513
Old Meldrum	1,065	258	81	-	1,404	16,047	132	3,506	3,426	+	44
Peterhead	12,876	3,492	977	-	17,345	198,243	1,411	37,474	45,705	-	8,231
Rosehearty	1,186	323	90	-	1,599	18,276	148	3,931	5,640	-	1,709
Turriff	2,777	695	211	-	3,683	42,095	385	10,225	9,745	+	40
TOTAL	138,817	35,960	10,528	-	185,305	2,117,926	9,559	253,875	286,719	-	32,844
ANGUS CO.											
Landward	37,238	8,873	-	-	46,111	527,021	1,031	27,382	27,694	-	312
Brechin	7,397	1,779	-	-	9,176	104,876	816	21,672	23,491	-	1,819
Carnoustie	5,191	1,024	-	-	6,215	71,034	769	20,424	23,719	-	3,295
Forfar	10,149	2,229	-	-	12,378	141,473	1,366	36,279	37,964	-	1,685
Kirriemuir	3,476	733	-	-	4,209	48,106	429	11,394	10,218	+	1,176
Monifieth	3,348	737	-	-	4,085	46,689	352	9,349	12,864	-	3,515
Montrose	10,736	2,618	-	-	13,354	152,628	989	26,266	28,102	-	1,836
	77,535	17,993	-	-	95,528	1,091,827	5,752	152,766	164,052	-	11,286

ARGYLL CO. /

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
74,806	726,894	770,917	734,152	718,240	1,320,218	28,652	1,348,870	698,292
19,411	18,323	-	19,134	18,046	683,459	14,833	18,311	-
16,689	17,471	3,948	16,599	17,381			20,438	3,783
118,805	111,130	50,825	114,244	106,569			143,007	46,179
38,153	40,666	18,161	38,400	40,913			58,132	17,871
51,622	50,087	23,941	51,387	49,852			64,818	21,029
7,793	7,280	5,407	7,675	7,162			10,542	4,535
11,414	11,458	4,589	11,296	11,340			12,484	3,597
128,484	120,253	77,990	126,476	118,245			172,488	68,552
10,575	8,866	9,410	10,680	8,971			14,327	7,335
28,909	29,389	12,706	28,110	28,590			36,585	11,257
1,174,661	1,141,817	977,894	1,158,153	1,125,309			1,900,002	882,430
287,126	286,814	240,207	283,337	283,025	487,953	5,017	492,970	226,314
77,459	75,640	29,236	75,671	73,852	224,010	2,303	113,899	32,302
70,743	67,448	3,586	69,897	66,602			81,303	4,154
116,991	115,306	26,167	116,033	114,348			168,217	31,326
36,705	37,881	10,225	35,871	37,047			45,864	9,920
42,748	39,233	7,456	41,942	38,427			44,828	7,285
112,288	110,452	42,176	111,049	109,213			154,469	43,034
744,060	732,774	359,053	733,800	722,514			1,101,550	354,335

8 (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
ARGYLL CO.											
Landward	31,852	6,826	9,181	-	47,859	547,000	1,455	38,643	42,347	-	3,704
Campbeltown	6,958	1,848	2,006	-	10,812	123,575	689	18,299	17,381	+	918
Dunoon	8,780	1,899	2,531	-	13,210	150,982	497	13,200	17,886	-	4,686
Inveraray	501	122	144	-	767	8,766	46	1,222	1,382	-	160
Lochgilphead	1,163	301	335	-	1,799	20,561	156	4,143	6,487	-	2,344
Oban	6,064	1,378	1,748	-	9,190	105,036	671	17,821	19,774	-	1,953
Tobermory	652	154	188	-	994	11,361	62	1,647	1,748	-	101
	55,970	12,528	16,133	-	84,631	967,281	3,576	94,975	107,005	-	12,030
AYR CO.											
Landward	133,695	34,340	-	987	169,022	1,931,820	18,369	487,854	362,205	+	125,649
Ardrossan	9,744	2,747	-	72	12,563	143,588	1,407	37,368	34,687	+	2,681
Cumnock	5,346	1,489	-	39	6,874	78,566	1,199	31,844	27,812	+	4,032
Darvel	3,341	702	-	25	4,068	46,495	507	13,465	16,798	-	3,333
Galston	4,570	1,058	-	34	5,662	64,713	571	15,165	17,898	-	2,733
Girvan	6,073	1,485	-	45	7,603	86,898	693	18,405	23,278	-	4,873
Irvine	16,418	4,454	-	121	20,993	239,937	3,020	80,207	80,374	-	167
Kilwinning	7,361	2,153	-	54	9,568	109,356	1,316	34,951	32,439	+	2,512
Largs	7,974	1,444	-	59	9,477	108,316	704	18,697	20,614	-	1,917
Maybole	5,034	1,313	-	37	6,384	72,965	638	16,944	18,779	-	1,835
Newmilns	3,974	860	-	29	4,863	55,581	497	13,200	15,464	-	2,264
Prestwick	11,830	2,943	-	87	14,860	169,841	858	22,787	28,084	-	5,297

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
282,190	278,486	168,514	275,448	271,744	517,913	7,094	525,007	260,934
73,811	74,729	48,846	72,335	73,253	257,408	3,526	115,084	46,040
136,371	131,685	19,297	134,327	129,641			170,653	22,110
5,672	5,512	3,254	5,760	5,600			8,842	3,250
14,028	11,684	8,877	13,892	11,548			21,545	9,364
89,594	87,641	17,395	87,859	85,906			115,875	19,512
6,892	6,791	4,570	6,303	6,202			11,947	5,068
608,558	596,528	370,753	595,924	583,894			968,953	366,278
1,347,649	1,473,298	458,522	1,322,234	1,447,883	1,789,905	41,155	1,831,060	440,400
123,900	126,581	17,007	123,437	126,118	430,502	9,898	148,959	17,700
53,472	57,504	21,062	52,361	56,393			66,725	23,583
41,325	37,992	8,503	41,000	37,667			41,906	7,718
40,067	37,334	27,379	38,790	36,057			47,940	20,691
73,236	68,363	18,535	74,168	69,295			80,295	16,945
173,193	173,026	66,911	168,791	168,624			221,698	62,980
65,097	67,609	41,747	64,315	66,827			106,113	40,801
132,756	130,839	-	132,319	130,402			125,707	-
40,812	38,977	33,988	39,721	37,886			67,514	31,926
39,411	37,147	18,434	38,400	36,136			52,171	17,624
152,219	146,922	22,919	151,513	146,216			156,372	21,190

9 (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Saltcoats	14,462	4,103	-	107	18,672	213,410	2,127	56,490	50,071	+ 6,419
Stevenston	10,097	2,572	-	74	12,743	145,645	1,828	48,549	42,759	+ 5,790
Stewarton	3,488	964	-	26	4,478	51,181	637	16,918	19,775	- 2,857
Troon	10,074	2,237	-	74	12,385	141,553	1,075	28,550	34,483	- 5,933
TOTAL	253,481	64,864	-	1,870	320,215	3,659,865	35,446	941,394	825,520	+115,874
BANFF CO.										
Landward	20,560	5,342	750	-	26,652	304,616	674	17,900	19,004	- 1,104
Aberchirder	777	244	28	-	1,049	11,989	64	1,700	2,232	- 532
Aberlour	1,114	499	41	-	1,654	18,904	74	1,965	2,064	- 99
Banff Burgh	3,360	878	122	-	4,360	49,832	503	13,359	11,944	+ 1,415
Buckie	8,023	2,118	292	-	10,433	119,243	969	25,735	31,372	- 5,637
Cullen	1,475	313	54	-	1,842	21,053	126	3,346	3,386	- 40
Dufftown	1,447	387	53	-	1,887	21,567	109	2,895	2,913	- 18
Findochty	1,455	366	53	-	1,874	21,419	134	3,559	3,763	- 204
Keith	4,414	1,123	161	-	5,698	65,125	401	10,650	9,386	+ 1,264
Macduff	3,360	867	122	-	4,349	49,706	580	15,404	13,170	+ 2,234
Portknockie	1,434	333	52	-	1,819	20,790	119	3,160	3,672	- 512
Portsoy	1,686	463	61	-	2,210	25,259	201	5,338	6,154	- 816
TOTAL	49,105	12,933	1,789	-	68,827	729,503	3,954	105,011	109,060	- 4,049

TABLE A - I (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
136,580	142,999	70,411	134,553	140,972			202,692	67,516
76,848	82,638	63,007	76,566	82,356			164,276	71,205
37,152	34,295	16,886	35,666	32,809			43,190	14,676
139,297	133,364	8,189	137,072	131,139			122,168	7,180
2,673,014	2,788,888	893,500	2,630,906	2,746,780			3,498,786	862,135
105,018	103,914	200,702	102,478	101,374	290,305	9,079	299,384	198,913
5,002	4,470	7,519	4,971	4,439	192,881	6,032	12,423	7,811
7,676	7,577	11,327	7,680	7,581			15,617	9,355
33,835	35,250	14,582	32,220	33,635			54,918	16,609
70,157	64,520	54,723	68,790	63,153			129,038	59,905
10,909	10,869	10,184	10,380	10,340			24,528	12,171
10,377	10,359	11,208	10,065	10,047			23,511	12,398
8,355	8,151	13,268	8,170	7,966			20,840	13,022
34,655	35,919	29,206	34,229	35,493			64,258	29,007
24,484	26,718	22,988	24,155	26,389			50,925	23,709
8,000	7,488	13,302	7,791	7,279			24,361	15,745
12,827	12,011	13,248	12,224	11,408			28,886	15,521
331,295	327,246	402,257	323,153	319,104			748,689	414,166

10 (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
BERWICK CO.											
Landward	17,450	3,813	4,847	-	26,110	298,422	771	20,477	24,573	-	4,096
Coldstream	1,296	324	360	-	1,980	22,630	196	5,205	7,296	-	2,091
Duns	1,921	449	533	-	2,903	33,180	225	5,976	7,000	-	1,024
Eyemouth	2,190	454	608	-	3,252	37,168	416	11,048	13,553	-	2,505
Lauder	577	112	160	-	849	9,704	20	531	1,104	-	573
TOTAL	23,434	5,152	6,508	-	35,094	401,104	1,628	43,237	53,526	-	10,289
BUTE CO.											
Landward	5,883	1,134	-	-	7,017	80,200	149	3,957	5,130	-	1,173
Millport	1,610	254	-	-	1,864	21,304	90	2,390	3,852	-	1,462
Rothesay	7,232	1,830	-	-	9,062	103,573	513	13,625	16,066	-	2,441
TOTAL	14,725	3,218	-	-	17,943	205,077	752	19,972	25,048	-	5,076
CAITHNESS CO.											
Landward	11,735	2,890	648	988	16,261	185,853	616	16,360	13,316	+	3,044
Thurso	6,545	1,957	362	550	9,414	107,596	657	17,449	17,036	+	413
Wick	7,881	2,124	435	664	11,104	126,912	938	24,912	22,603	+	2,309
TOTAL	26,161	6,971	1,445	2,202	36,779	420,361	2,211	58,721	52,955	+	5,766
CLACKMANNAN CO.											
Landward	16,851	4,999	-	359	22,209	253,836	2,394	63,581	79,121	-	
Alloa	14,303	3,725	-	305	18,333	209,535	2,396	63,634	63,147	+	487
Alva	4,220	1,005	-	90	5,315	60,747	723	19,202	23,374	-	4,172
Dollar	1,679	469	-	36	2,184	24,962	160	4,249	4,924	-	675
Tillicoultry	4,137	1,154	-	88	5,379	61,479	591	15,696	18,764	-	3,068
TOTAL	41,190	11,352	-	878	53,420	610,559	6,264	166,362	189,330	-	22,968

TABLE A - I (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
137,107	133,011	165,411	134,763	130,667	262,495	1,029	263,524	147,224
17,905	15,814	6,816	17,470	15,379	146,649	575	21,325	6,549
25,350	24,326	8,854	24,574	23,550			29,508	8,063
26,282	23,777	13,391	25,753	23,248			33,589	12,276
6,208	5,635	4,069	6,240	5,667			8,882	3,712
212,852	202,563	198,541	208,800	198,511			356,828	177,824
71,007	69,834	10,366	68,373	67,200	66,591	454	67,045	8,960
33,649	32,187	-	32,929	31,467	8,899	61	36,256	-
140,621	138,180	-	137,498	135,057			159,601	-
245,277	240,201	10,366	238,800	233,724			262,902	8,960
82,378	85,422	100,431	80,951	83,995	193,930	1,270	195,200	106,298
68,721	69,134	38,462	67,434	67,847	105,606	692	97,456	35,259
64,634	66,943	59,969	63,693	66,002			131,145	62,432
215,733	221,499	198,862	212,078	217,844			423,801	203,989
203,188	187,648	66,188	213,176	197,636	266,942	7,440	274,382	68,837
180,245	180,732	28,803	181,119	181,606	66,970	1,867	261,424	35,786
40,944	36,772	23,975	40,533	36,361			68,029	27,032
19,790	19,115	5,847	19,572	18,897			27,151	6,416
42,527	39,459	22,020	41,743	38,675			66,227	24,027
486,694	463,726	146,833	496,143	473,175			697,213	162,098

II (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
DUMFRIES CO.											
Landward	45,940	11,444	4,266	-	61,650	704,623	2,724	72,346	96,188	-	23,842
Annan	5,275	1,433	490	-	7,198	82,269	884	23,478	30,788	-	7,310
Langholm	2,335	488	217	-	3,040	34,745	165	4,382	6,287	-	1,905
Lochmaben	1,228	340	114	-	1,682	19,224	156	4,143	5,650	-	1,507
Lockerbie	2,661	610	247	-	3,518	40,209	321	8,525	11,181	-	2,656
Moffat	2,027	475	188	-	2,690	30,745	176	4,674	5,843	-	1,169
Sanquhar	2,506	696	233	-	3,435	39,260	315	8,366	9,590	-	1,224
TOTAL	61,972	15,486	5,755	-	83,213	951,075	4,741	125,914	165,527	-	39,613
DUNBARTON CO.											
Landward	53,060	14,027	-	588	67,675	773,485	6,318	167,797	161,241	+	6,556
Bearsden	13,790	3,013	-	153	16,956	193,797	241	6,401	6,614	-	213
Cove	804	119	-	9	932	10,652	44	1,169	1,736	-	567
Helensburgh	8,699	1,937	-	96	10,732	122,660	770	20,450	24,163	-	3,713
Kirkintilloch	16,667	4,541	-	185	21,393	244,509	2,362	62,731	70,832	-	8,101
Milngavie	8,351	2,141	-	93	10,585	120,980	1,008	26,771	32,998	-	6,227
TOTAL	101,371	25,778	-	1,124	128,273	1,466,083	10,743	285,319	297,584	-	12,265
EAST LOTHIAN CO.											
Landward	25,712	6,420	-	-	32,132	367,249	3,272	86,900	82,883	+	4,017
Cockenzie	3,369	883	-	-	4,252	48,598	695	18,458	19,622	-	1,164
Dunbar	4,157	1,020	-	-	5,177	59,170	643	17,077	21,912	-	4,835
East Linton	932	200	-	-	1,132	12,938	142	3,771	4,505	-	734
Haddington	4,732	1,174	-	-	5,906	67,502	784	20,822	21,344	-	522
North Berwick	3,715	766	-	-	4,481	51,215	423	11,234	15,415	-	4,181
Prestonpans	3,203	955	-	-	4,158	47,523	651	17,290	16,906	+	384
Tranent	6,401	1,769	-	-	8,170	93,378	1,124	19,852	31,179	-	1,327
TOTAL											

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
473,957	450,115	254,508	474,858	451,016	705,499	2,918	708,417	255,552
68,057	60,747	21,522	67,207	59,897	254,499	1,053	97,065	25,658
25,419	23,514	11,231	25,213	23,308			34,591	11,348
12,338	10,831	8,393	12,198	10,691			16,399	7,212
38,555	35,899	4,310	38,211	35,555			39,733	4,296
28,400	27,231	3,514	27,616	26,447			34,522	4,049
24,240	23,016	16,244	23,893	22,669			39,396	16,447
670,966	631,353	319,722	669,196	629,583			970,123	324,461
623,101	629,657	143,828	611,249	617,805	963,523	34,019	997,542	188,377
229,663	229,450	-	232,127	231,914	181,953	6,424	275,357	-
15,017	14,450	-	14,331	13,764			15,255	-
144,010	140,297	-	141,340	137,627			154,897	-
156,841	148,740	95,769	157,010	148,909			248,737	97,258
120,449	114,222	6,758	119,109	112,882			131,969	7,454
1,289,081	1,276,816	246,355	1,275,166	1,262,901			1,823,757	293,189
271,591	275,608	91,641	266,285	270,302	321,336	10,151	331,487	83,930
34,571	33,407	15,191	34,036	32,036	81,360	2,570	44,024	13,914
62,222	57,387	1,783	60,821	55,986			57,898	1,787
10,836	10,102	2,836	10,609	9,875			12,050	2,689
63,380	62,858	4,644	60,712	60,190			63,206	4,527
79,591	75,410	-	78,809	74,628			76,561	-
29,822	30,206	17,317	28,996	29,380			42,849	15,890
58,918	57,591	35,787	57,837	56,510			86,876	33,685

12 (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIFE CO.										
Landward	115,954	32,836			148,790	1,700,580	12,402	329,379	338,164	- 8,785
Auchtermuchty	1,340	342			1,682	19,224	144	3,824	5,508	- 1,684
Buckhaven	21,888	6,116			28,004	320,069	3,190	84,722	83,241	+ 1,481
Burntisland	6,097	1,364			7,461	85,275	978	25,974	29,652	- 3,678
Cowdenbeath	13,623	3,461			17,084	195,260	1,824	48,443	49,727	- 1,284
Crail	1,188	284			1,472	16,824	77	2,045	2,854	- 809
Culross	585	142			727	8,309	50	1,328	1,828	- 500
Cupar	5,722	1,320			7,042	80,486	597	15,855	17,490	- 1,635
Elie & Earlsferry	909	141			1,050	12,001	59	1,567	1,995	- 428
Falkland	1,067	248			1,315	15,030	178	4,727	6,371	- 1,644
Inverkeithing	4,119	1,191			5,310	60,690	759	20,158	24,324	- 4,166
Kilrenny etc.	2,959	638			3,597	41,112	183	4,860	6,754	- 1,894
Kinghorn	2,331	517			2,848	32,551	331	8,791	8,756	+ 35
Ladybank	1,186	266			1,452	16,595	134	3,559	4,014	- 455
Leslie	3,480	853			4,333	49,524	590	15,670	21,008	- 5,338
Leven	9,056	2,076			11,132	127,232	1,406	37,341	45,759	- 8,418
Lochgelly	9,655	2,538			12,193	139,359	1,575	41,830	48,729	- 6,899
Markinch	2,423	580			3,003	34,322	476	12,642	12,796	- 154
Newburgh	2,503	569			3,072	35,111	282	7,490	10,443	- 2,953
Newport	3,284	727			4,011	45,843	198	5,259	6,747	- 1,488
Pittenweem	1,577	349			1,926	22,013	212	5,630	6,262	- 632
St. Andrews	9,650	1,734			11,384	130,112	1,167	30,994	30,697	+ 297
St. Monance	1,464	286			1,750	20,001	200	5,312	5,797	- 485
Tayport	3,273	798			4,071	46,529	396	10,517	11,459	- 942
TOTAL	225,333	59,376	-	-	284,709	3,254,052	27,408	727,917	780,375	- 52,458

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1,145,918	1,137,133	563,447	1,146,863	1,138,078	1,890,282	32,476	1,922,758	636,707
15,190	13,506	5,718	14,970	13,286	625,953	10,754	22,350	6,725
195,638	197,119	122,950	192,218	193,699			284,629	110,517
82,812	79,134	6,141	81,739	78,061			95,727	6,982
115,128	113,844	81,416	115,302	114,018			185,277	77,185
13,534	12,725	4,099	13,344	12,535			17,647	4,349
4,847	4,347	3,962	4,762	4,262			7,189	3,463
71,600	69,965	10,521	71,984	70,349			69,215	9,005
20,792	20,364	-	20,597	20,169			18,099	-
13,531	11,887	3,143	13,499	11,855			14,526	3,044
47,341	43,175	17,515	46,325	42,159			60,329	17,707
28,585	26,691	14,421	28,125	16,231			40,235	14,273
23,722	23,757	8,794	23,542	23,577			35,833	9,734
11,367	10,912	5,683	11,239	10,784			15,457	5,334
40,146	34,808	14,716	37,132	31,794			55,789	17,652
116,583	108,165	19,067	114,999	106,581			137,905	20,927
85,814	78,915	60,444	85,403	78,504			137,842	59,963
33,180	33,026	1,296	33,031	32,877			38,644	1,466
27,199	24,246	10,865	27,000	24,047			32,476	10,107
50,336	48,848	-	49,480	47,992			44,950	-
15,043	14,411	7,602	14,784	14,152			19,923	6,962
153,153	153,450	-	151,750	152,047			136,388	-
11,811	11,326	8,675	11,562	11,077			18,623	8,179
32,739	31,797	14,732	32,531	31,589			43,745	13,913
2,356,009	2,303,551	985,207	2,342,181	2,289,723			3,455,556	1,044,194

13 (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
INVERNESS CO.											
Landward	51,027	12,332	20,476		83,835	958,184	2,409	63,980	58,335	+	5,645
Fort William	2,846	707	1,142		4,695	53,661	421	11,181	10,627	+	554
Kingussie	1,042	240	418		1,700	19,430	56	1,487	1,274	+	213
TOTAL	54,915	13,279	22,036	-	90,230	1,031,275	2,886	76,648	70,236	+	6,412
KINCARDINE CO.											
Landward	18,095	4,751	2,470		25,316	289,347	661	17,555	21,720	-	4,165
Banchory	1,884	426	257		2,567	29,339	178	4,727	5,620	-	893
Inverbervie	918	190	125		1,233	14,092	130	3,453	4,038	-	585
Laurencekirk	1,399	336	191		1,926	22,013	86	2,284	2,802	-	518
Stonehaven	4,391	996	599		5,986	68,416	562	14,926	15,717	-	791
TOTAL	26,687	6,699	3,642	-	37,028	423,207	1,617	42,945	49,897	-	6,952
KIRKCUDBRIGHT CO.											
Landward	19,892	4,988	5,725		30,605	349,797	779	20,689	26,643	-	5,954
Castle Douglas	3,298	763	949		5,010	57,261	420	11,155	13,372	-	2,217
Dalbeattie	3,402	831	979		5,212	59,570	333	8,844	9,094	-	250
Gatehouse	886	197	255		1,338	15,293	88	2,337	3,007	-	670
Kirkcudbright B.	2,503	620	720		3,843	43,923	292	7,755	9,335	-	1,580
New Galloway	287	45	83		415	4,743	16	425	465	-	40
TOTAL	30,268	7,444	8,711	-	46,423	530,587	1,928	51,205	61,916	-	10,711
LANARK CO.											
Landward	319,322	85,109			404,431	4,622,404	40,202	1,067,708	848,378	+	219,330
Biggar	1,442	337			1,779	20,333	182	4,834	4,980	-	146
Lanark Burgh	8,285	2,491			10,776	123,163	997	26,479	27,748	-	1,269
TOTAL	329,049	87,937	-	-	416,986	4,765,900	41,381	1,099,021	881,106	+	217,915

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
418,991	424,636	533,548	410,308	415,953	892,520	6,337	898,857	505,090
38,163	38,717	14,944	38,128	38,682	501,529	3,561	61,388	17,107
13,639	13,852	5,578	12,896	13,109			17,740	5,295
470,793	477,205	554,070	461,332	467,744			977,985	527,492
128,921	124,756	164,591	126,602	122,437	214,718	2,802	217,520	124,733
26,616	25,723	3,616	26,353	25,460	123,126	1,607	25,362	3,154
10,290	9,705	4,387	10,239	9,654			12,426	3,882
15,584	15,066	6,947	15,301	14,783			15,942	5,097
51,479	50,688	17,728	50,649	49,858			60,154	15,779
232,890	225,938	197,269	229,144	222,192			331,404	152,645
165,220	159,266	190,531	163,483	157,529	269,339	1,197	270,536	148,094
42,808	40,591	16,670	42,571	40,354	147,439	655	54,544	15,945
26,635	26,385	33,185	25,899	25,649			47,531	26,810
7,990	7,320	7,973	7,773	7,103			13,552	7,167
28,563	27,003	16,920	28,107	26,527			39,447	15,362
3,316	3,276	1,467	3,276	3,236			3,745	1,168
274,552	263,841	266,746	271,109	260,398			429,355	214,546
3,393,567	3,612,897	1,009,507	3,373,635	3,592,965	5,009,285	360,207	5,369,492	1,177,745
16,882	16,736	3,597	16,657	16,511	1,098,737	79,008	21,348	3,819
94,229	92,960	30,203	93,125	91,856			124,464	30,798
3,504,678	3,722,593	1,043,307	3,483,417	3,701,332			5,515,304	1,212,362

14 (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
MIDLOTHIAN CO.											
Landward	64,353	18,161		908	83,422	953,463	7,470	198,392	195,637	+	2,755
Bonnyrigg	6,102	1,600		86	7,788	89,012	1,161	30,834	34,449	-	3,615
Dalkeith	9,173	2,374		129	11,676	133,450	1,629	43,264	43,127	+	137
Loanhead	5,233	1,388		74	6,695	76,520	772	20,503	24,948	-	4,445
Musselburgh	18,124	4,410		256	22,790	260,476	2,605	69,185	73,017	-	3,832
Penicuik	5,869	1,846		83	7,798	89,126	872	23,159	25,272	-	2,113
TOTAL	108,854	29,779	-	1,536	140,169	1,602,047	14,509	385,337	396,450	-	11,113
MORAY AND NAIRN											
MORAY CO. Landward	23,846	5,994	-	-	29,840	341,053	775	20,583	21,544	-	961
NAIRN CO. Landward	3,536	784	-	-	4,320	49,375	125	3,320	4,486	-	1,166
Burghhead	1,388	403	-	-	1,791	20,470	65	1,726	2,501	-	775
Elgin	11,707	3,229	-	-	14,936	170,710	1,435	38,112	46,493	-	8,381
Forres	5,056	1,372	-	-	6,428	73,468	483	12,828	15,776	-	2,948
Grantown/Spey	1,475	324	-	-	1,799	20,561	119	3,160	3,868	-	708
Lossiemouth	5,270	1,631	-	-	6,901	78,874	492	13,067	17,326	-	4,259
Rothes	1,202	277	-	-	1,479	16,904	102	2,709	3,058	-	349
Nairn Burgh	4,742	1,199	-	-	5,941	67,902	567	15,059	19,024	-	3,965
TOTAL	58,222	15,213	-	-	73,435	839,317	4,163	110,564	134,076	-	23,512
ORKNEY CO.											
Landward	13,605	3,199	3,525	-	20,329	232,348	6	159	78	+	81
Kirkwall	4,186	1,007	1,084	-	6,277	71,742	574	15,245	16,559	-	1,314
Stromness	1,448	316	375	-	2,139	24,447	100	2,656	2,655	+	1
TOTAL	19,239	4,522	4,984	-	28,745	328,537	680	18,060	19,292	-	1,232

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
715,778	718,533	234,930	709,029	711,784	909,838	27,005	936,843	232,480
70,599	66,984	22,028	70,387	66,772	225,779	6,701	88,076	21,848
99,807	99,944	23,506	100,979	101,116			130,276	32,424
51,947	47,502	29,018	50,855	46,410			77,188	29,695
201,238	197,406	63,070	198,042	194,210			272,926	66,905
68,955	66,842	22,284	66,240	64,127			86,649	22,345
1,208,324	1,197,211	404,836	1,195,532	1,184,419			1,591,958	405,697
185,260	184,299	156,754	183,428	182,467	214,941	252	214,193	98,979
25,858	24,692	24,683	25,278	24,112	41,486	48	41,534	21,010
8,873	8,098	12,372	8,604	7,829	98,863	116	11,520	7,055
157,549	149,168	21,542	155,101	146,720	20,986	24	168,023	21,511
54,946	51,998	21,470	54,804	51,856			54,964	16,094
20,984	20,276	265	20,639	19,931			18,987	268
46,051	41,792	37,082	45,372	41,113			59,784	28,351
12,934	12,585	4,319	12,752	12,403			12,022	3,105
58,875	54,910	12,992	57,805	53,840			68,898	13,394
571,330	547,818	291,499	563,783	540,271			649,925	209,767
34,956	35,037	197,311	33,985	34,066	163,416	9,592	173,008	147,536
46,698	45,384	26,358	46,646	45,332	139,356	8,180	62,357	22,927
11,629	11,630	12,817	11,637	11,638			20,340	10,660
93,283	92,051	236,486	92,268	91,036			255,705	181,123

15 (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
PEEBLES CO.											
Landward	6,172	1,410	196	-	7,778	88,898	262	6,958	9,464	-	2,506
Innerleithen	2,336	521	74	-	2,931	33,500	378	10,039	11,816	-	1,777
Peebles Burgh	5,508	1,140	174	-	6,822	77,971	595	15,855	18,599	-	2,744
TOTAL	14,016	3,071	444	-	17,531	200,369	1,237	32,852	39,879	-	7,027
PERTH AND KINROSS											
PERTH CO. Landward	58,148	13,128	4,395	-	75,671	864,874	2,816	74,789	92,566	-	17,777
KINROSS CO. Landward	4,609	997	348	-	5,954	68,051	160	4,249	5,648	-	1,399
Aberfeldy	1,470	345	111	-	1,926	22,013	184	4,887	6,357	-	1,470
Abernethy	635	123	48	-	806	9,212	75	1,992	2,662	-	670
Alyth	1,985	493	150	-	2,628	30,036	203	5,391	5,630	-	239
Auchterarder	2,374	572	179	-	3,125	35,717	293	7,782	10,295	-	2,513
Blairgowrie	5,326	1,298	403	-	7,027	80,314	495	13,146	17,856	-	4,710
Callander	1,607	348	121	-	2,076	23,727	175	4,648	6,133	-	1,485
Coupar-Angus	2,143	491	162	-	2,796	31,957	216	5,737	7,116	-	1,379
Crieff	5,397	1,234	408	-	7,039	80,452	463	12,297	15,994	-	3,697
Doune	843	203	64	-	1,110	12,687	82	2,178	2,692	-	514
Dunblane	2,870	621	217	-	3,708	42,380	329	8,738	11,955	-	3,217
Kinross Burgh	2,526	632	191	-	3,349	38,277	214	5,684	7,468	-	1,784
Pitlochry	2,322	561	176	-	3,059	34,963	164	4,356	5,743	-	1,387
TOTAL	92,255	21,046	6,973	-	120,274	1,374,660	5,869	155,874	198,115	-	42,241

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
95,251	92,745	-	93,876	91,370	100,493	327	100,820	-
28,660	26,883	6,617	28,148	26,371			44,905	9,007
72,125	69,381	8,590	71,396	68,652			95,903	10,665
196,036	189,009	15,207	193,420	186,393			241,628	19,672
584,982	567,205	297,669	576,396	558,619	720,291	12,035	732,326	254,576
43,912	42,513	25,538	42,072	40,673	59,439	270	59,709	23,030
21,255	19,785	2,228	21,161	19,691	250,392	4,184	23,610	2,400
5,577	4,907	4,305	5,551	4,881	22,926	104	7,916	3,710
18,909	18,670	11,366	17,888	17,649			28,101	11,008
25,680	23,167	12,550	25,458	22,945			31,848	11,261
55,880	51,170	29,144	54,639	49,929			75,405	27,792
22,897	21,412	2,315	23,547	22,062			24,466	2,323
21,826	20,447	11,510	21,573	20,194			30,766	11,169
72,331	68,634	11,818	71,807	68,110			79,203	11,711
10,278	9,764	2,923	10,027	9,513			13,094	3,078
38,531	35,314	7,066	38,112	34,895			42,996	7,240
23,133	21,349	16,928	22,853	21,069			32,201	14,346
33,387	32,000	2,963	32,919	31,532			34,617	2,973
978,578	936,337	438,323	964,003	921,762			1,216,258	386,617

16 (contd.)

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
RENFREW CO.										
Landward	80,360	17,541	-	-	97,901	1,118,950	5,779	153,482	206,288	- 52,806
Barrhead	14,035	3,922	-	-	17,957	205,238	2,238	59,438	71,015	- 11,577
Gourock	9,206	2,061	-	-	11,267	128,775	788	20,928	29,477	- 8,549
Johnstone	16,866	4,783	-	-	21,649	247,435	2,724	72,346	84,229	- 11,883
Renfrew Burgh	18,058	4,644	-	-	22,702	259,470	2,517	66,848	89,469	- 22,621
TOTAL	138,525	32,951	-	-	171,476	1,959,868	14,046	373,042	480,478	- 107,436
ROSS & CROMARTY CO.										
Landward	45,377	10,948	7,057	-	63,382	724,418	1,266	33,623	39,530	- 5,907
Cromarty Burgh	662	146	103	-	911	10,412	52	1,381	1,644	- 263
Dingwall	3,567	993	555	-	5,115	58,461	429	11,394	11,453	- 59
Fortrose	852	183	133	-	1,168	13,350	64	1,700	1,864	- 164
Invergordon	1,626	384	253	-	2,263	25,865	178	4,727	5,274	- 547
Stornoway	5,283	1,236	822	-	7,341	83,903	738	19,600	19,327	+ 273
Tain	1,672	426	260	-	2,358	26,951	189	5,020	5,432	- 412
TOTAL	59,039	14,316	9,183	-	82,538	943,360	2,916	77,445	84,524	- 7,079
ROXBURGH CO.										
Landward	17,913	4,021	1,012	-	22,946	262,259	949	25,204	28,233	- 3,029
Hawick	16,547	3,582	936	-	21,065	240,760	1,751	46,504	58,293	- 11,789
Jedburgh	3,951	1,017	223	-	5,191	59,330	700	18,591	23,579	- 4,988
Kelso	4,134	951	234	-	5,319	60,793	603	16,015	23,102	- 7,087
Melrose	2,133	367	121	-	2,621	29,956	142	3,771	4,730	- 959
TOTAL	44,678	9,938	2,526	-	57,142	653,098	4,145	110,085	137,937	- 27,852

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
1,166,403	1,113,597	5,353	1,154,499	1,101,693	1,005,766	52,835	1,058,601	5,119
160,771	149,194	56,044	160,036	148,459	4,864	255	193,341	52,985
131,994	123,445	5,330	130,141	121,592			128,044	5,377
164,368	152,485	94,950	164,123	152,240			269,029	103,339
426,237	403,616	-	423,489	400,868			350,127	-
2,049,773	1,942,337	161,677	2,032,288	1,924,852			1,999,142	166,820
189,841	183,934	540,484	181,715	175,808	654,757	33,174	687,931	519,084
6,140	5,877	4,535	5,602	5,339	494,052	25,032	10,897	5,005
41,635	41,576	16,885	39,456	39,397			63,327	18,999
10,073	9,909	3,441	9,631	9,467			15,682	4,180
27,310	26,763	-	26,531	25,984			26,928	-
63,752	64,025	19,878	63,080	63,353			86,565	20,674
21,586	21,174	5,777	21,157	20,745			30,506	6,645
360,337	353,258	591,000	347,172	340,093			921,836	574,587
140,288	137,259	125,000	135,173	132,144	210,506	2,593	213,099	103,589
182,605	170,816	69,944	179,292	167,503	102,329	1,260	225,994	66,570
49,823	44,835	14,495	46,406	41,418			62,757	16,269
62,480	55,393	5,400	60,000	52,913			60,130	5,568
25,974	25,015	4,941	25,974	25,015			27,676	4,565
461,170	433,318	219,780	446,845	418,993			589,656	196,561

TABLE A - 1 (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
SELKIRK CO.										
Landward	3,072	654	-	-	3,726	42,586	45	1,195	1,453	- 258
Galashiels	12,185	2,704	-	-	14,889	170,172	876	23,265	34,818	- 11,553
Selkirk Burgh	5,699	1,241	-	-	6,940	79,320	588	15,616	20,376	- 4,760
TOTAL	20,956	4,599	-	-	25,555	292,078	1,509	40,076	56,647	- 16,571
STIRLING CO.										
Landward	90,623	23,350	-	-	113,973	1,302,643	14,101	374,502	287,267	+ 87,235
Bridge-of-Allan	3,232	730	-	-	3,962	45,283	277	7,357	11,474	- 4,117
Denny & D'pace	7,613	2,185	-	-	9,798	111,985	1,463	38,855	34,120	+ 4,735
Grangemouth	17,584	4,669	-	-	22,253	254,338	2,971	78,906	99,668	- 20,762
Kilsyth	10,446	2,782	-	-	13,228	151,188	1,845	49,001	41,093	+ 7,908
TOTAL	129,498	33,716	-	-	163,214	1,865,437	20,657	548,621	473,622	+ 74,999
SUTHERLAND CO.										
Landward	12,098	2,928	12,352	-	27,378	312,914	783	20,795	19,995	+ 800
Dornoch	837	196	855	-	1,888	21,579	72	1,912	1,996	- 84
TOTAL	12,935	3,124	13,207	-	29,266	334,493	855	22,707	21,991	+ 716
WEST LOTHIAN CO.										
Landward	52,319	13,661	-	-	65,980	754,112	5,799	154,013	132,556	+ 21,457
Armadale	6,237	1,685	-	-	7,922	90,544	1,471	39,068	25,833	+ 13,235
Bathgate	12,157	3,424	-	-	15,581	178,081	1,728	45,893	45,748	+ 145
Bo'ness	10,329	2,707	-	-	13,036	148,994	1,139	30,250	25,866	+ 4,384
Linlithgow	4,234	1,170	-	-	5,404	61,764	591	15,696	21,338	- 5,642
Queensferry	2,777	839	-	-	3,616	41,329	555	14,740	17,552	- 2,812
Whitburn	5,945	1,882	-	-	7,827	89,458	1,191	31,631	27,912	+ 3,719
TOTAL	93,998	25,368	-	-	119,366	1,364,282	12,474	331,291	296,805	+ 34,486

TABLE A - 1 (contd.)

(11)	(12)	(3)	(14)	(15)	(16)	(17)	(18)	(19)
24,640	24,382	18,204	24,200	23,942	43,160	76	43,236	18,675
158,850	147,297	22,875	155,592	144,039	18,642	33	196,592	26,942
65,447	60,687	18,633	63,621	58,861			93,335	22,442
248,937	232,366	59,712	243,413	226,842			333,163	68,059
837,649	924,884	377,759	838,316	925,551	1,638,717	43,297	1,682,014	487,525
48,276	44,159	1,124	48,031	43,914	474,976	12,549	55,015	1,373
64,498	69,233	42,752	64,800	69,535			124,195	47,286
409,184	388,422	-	416,687	395,925			393,630	-
73,086	80,994	70,194	72,063	79,971			145,544	68,034
1,432,693	1,507,692	491,829	1,439,897	1,514,896			2,400,398	604,218
77,523	78,323	234,591	75,748	76,548	337,291	7,939	345,230	260,295
8,973	8,889	12,690	8,973	8,889	254,309	5,986	23,532	13,839
86,496	87,212	247,281	84,721	85,437			368,762	274,134
461,317	482,774	271,338	451,787	473,244	812,759	22,036	834,795	304,213
46,151	59,386	31,158	45,745	58,980	296,182	8,031	108,522	37,513
137,337	137,482	40,599	139,634	139,779			182,128	40,993
97,164	101,548	47,446	94,526	98,910			146,519	47,499
53,464	47,822	13,942	52,092	46,450			58,581	13,524
43,088	40,276	1,053	42,679	39,867			41,144	1,059
44,880	48,599	40,859	44,880	48,599			99,905	45,631
883,401	917,887	446,395	871,343	905,829			1,471,594	490,432

TABLE A - I (contd.)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
WIGTOWN CO.										
Landward	16,794	4,775	1,967	-	23,536	269,002	852	22,628	31,260	- 8,632
Newton-Stewart	2,031	522	238	-	2,791	31,899	284	7,543	7,692	- 149
Stranraer	9,113	2,376	1,067	-	12,556	143,508	1,448	38,457	43,250	- 4,793
Whithorn	1,036	294	121	-	1,451	16,584	101	2,682	3,668	- 986
Wigtown Burgh	1,331	352	156	-	1,839	21,019	132	3,506	3,598	- 92
TOTAL	30,305	8,319	3,549	-	42,173	482,012	2,817	74,816	89,468	- 14,652
ZETLAND CO.										
Landward	12,633	2,743	3,769	-	19,145	218,816	265	7,038	4,937	+ 2,101
Lerwick	5,572	1,298	1,663	-	8,533	97,527	813	21,592	15,172	+ 6,420
TOTAL	18,205	4,041	5,432	-	27,678	316,343	1,078	28,630	20,109	+ 8,521
TOTAL COUNTIES	2,402,959	610,160	122,845	7,610	3,143,574	35,929,156	254,535	6,760,086	6,783,015	- 22,929

TABLE A - 1 (contd.)

(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
123,030	114,398	154,604	120,339	111,707	249,762	3,516	253,278	147,038
23,033	22,884	9,015	22,438	22,289	144,997	2,041	30,824	8,877
92,215	87,422	56,086	91,938	87,145			155,249	60,792
8,703	7,717	8,867	8,650	7,664			17,431	9,350
9,095	9,003	12,016	9,000	8,908			19,231	11,044
256,076	241,424	240,588	252,365	237,713			476,013	237,101
27,361	29,462	189,354	25,237	27,338	279,393	1,304	280,697	245,284
53,166	59,586	37,941	52,390	58,810	244,145	1,139	130,936	51,347
80,527	89,048	227,295	77,627	86,148			411,633	296,631
25,009,005	24,986,076	11,411,842	24,732,084	24,709,155			37,104,830	11,468,945

19 (contd.)

Table A - 2

General Grant Calculations for Education Areas 1959/60
(excluding Pooled Expenditure Adjustment)

Education Areas	Population 30/6/58 (1)	Weighting for Children under 15 years (2)	Weighting for pupils per mile of road (3)	Weighting for Landward Population (4)	Total of Weighted Population (5)	General Grant Col.(5) x £7.5587 (6)
Counties of Cities -						
Aberdeen	186,350	44,759	-	-	231,109	£ 1,746,886
Dundee	180,166	45,334	-	-	225,500	1,704,489
Edinburgh	467,410	105,356	-	-	572,766	4,329,371
Glasgow	1,078,958	278,574	-	-	1,357,532	10,261,189
Counties -						
Aberdeen	139,581	36,477	13,958	34,895	224,911	1,700,037
Angus	97,124	23,150	-	-	120,274	909,116
Argyll	56,381	12,638	19,733	2,819	91,571	692,158
Ayr	338,444	85,354	-	-	423,798	3,203,365
Banff	49,039	13,021	2,452	-	64,512	487,627
Bute	14,970	3,316	2,245	-	20,531	155,188
Berwick	23,461	5,183	7,038	5,866	41,548	314,049
Caithness	25,387	6,616	2,539	1,269	35,811	270,685
Clackmannan	40,578	11,105	-	-	51,683	390,657
Dumfries	89,439	22,114	-	4,472	116,025	876,999
Dunbarton	177,368	47,667	-	-	225,035	1,700,974
East Lothian	51,840	13,108	-	-	64,948	490,923
Fife	322,195	82,966	-	-	405,161	3,062,494
Inverness	82,895	20,545	22,796	12,434	138,670	1,048,166
Kincardine	26,859	6,819	4,700	4,029	42,407	320,542
Kirkcudbright	30,403	7,509	9,121	4,560	51,593	389,976
Lanark	549,019	148,438	-	27,451	724,908	5,479,368
Midlothian	107,732	29,284	-	5,387	142,403	1,076,383
Moray and Nairn	57,438	15,006	-	-	72,444	547,583
Orkney	19,533	4,676	6,837	4,883	35,929	271,577
Peebles	14,211	3,126	2,132	-	19,469	147,160
Perth and Kinross	134,159	30,810	-	-	164,969	1,246,953
Renfrew	335,171	85,751	-	-	420,922	3,181,627
Ross and Cromarty	59,823	14,505	13,460	29,912	117,700	889,660
Roxburgh/						

TABLE A - 2 (contd.)

Education Areas	Population 30/6/58 (1)	Weighting for Children under 15 years (2)	Weighting for pupils per mile of road (3)	Weighting for Landward Population (4)	Total of Weighted Population (5)	General Grant Col.(5) x £7.5587 (6)
Counties -						
Roxburgh	44,766	9,906	7,834	-	62,506	£ 472,465
Selkirk	20,964	4,552	-	-	25,516	192,868
Stirling	192,782	48,371	-	-	241,153	1,822,805
Sutherland	13,055	3,111	5,875	9,791	31,832	240,609
West Lothian	93,028	25,206	-	4,651	122,885	928,852
Wigtown	30,090	8,193	4,514	1,504	44,301	334,858
Zetland	18,373	4,144	7,349	2,756	32,622	246,580
Total Scotland	5,168,992	1,306,690	132,583	156,679	6,764,944	£51,134,239

TABLE A - 3

Data on Education Expenditure per head and factors associated with different Expenditures per head

Education Area	Education Expend. per head 1959/60	Density: Population per sq. mile	Ratio of Scholars to population	Ratio of children Under 15 to population	Population per mile of road	Pupils per mile of road	Ratio of Landward to total population as a percentage	General Grant per head
Counties of Cities -								
Aberdeen	£16.010	10,752	.168	.242	818.1	126.8	Nil	£ 9.37
Dundee	13.351	9,574	.191	.254	771.9	128.9	Nil	9.46
Edinburgh	10.951	9,003	.152	.228	944.6	127.7	Nil	9.26
Glasgow	14.401	17,469	.187	.260	1423.8	237.3	Nil	9.51
Counties -								
Aberdeen	14.877	70	.181	.259	57.4	10.2	71	12.18
Angus	11.928	112	.161	.236	93.0	14.9	38	9.36
Argyll	15.240	19	.160	.224	32.9	5.2	57	12.28
Ayr	11.588	303	.180	.254	202.4	34.0	39	9.47
Banff	15.035	74	.178	.263	63.0	11.1	42	9.94
Bute	14.080	69	.138	.219	65.9	9.2	41	10.37
Berwick	16.286	49	.169	.220	38.3	6.2	75	13.39
Caithness	15.974	40	.229	.266	58.4	10.3	53	10.66
Clackmannan	14.431	758	.199	.276	383.7	68.3	41	9.63
Dumfries	13.541	82	.171	.249	76.2	12.7	51	9.81
Dunbarton	12.869	765	.179	.271	402.8	67.8	30	9.59
East Lothian	12.642	197	.176	.253	107.0	17.8	49	9.47
Fife	13.859	635	.189	.258	301.5	53.3	36	9.51
Inverness	16.308	19	.178	.247	39.5	6.8	61	12.65
Kincardine	13.160	129	.176	.251	50.0	8.7	68	11.93
Kirkcudbright	15.792	32	.162	.246	37.6	6.0	66	12.83
Lanark	13.741	682	.197	.271	326.9	58.9	58	9.98
Midlothian	14.133	356	.187	.273	198.7	34.8	59	9.99
Moray and Nairn	11.927	155	.177	.261	81.3	13.8	47	9.53
Orkney	17.940	50	.164	.235	31.6	5.2	71	13.90
Peebles	14.202	41	.156	.219	64.8	9.5	44	10.36
Perth and Kinross	12.524	133	.156	.232	80.3	12.2	48	9.30
Renfrew	11.319	1,508	.177	.257	447.3	73.9	24	9.49
Ross and Cromarty	16.920	19	.179	.242	45.6	7.9	77	14.87
Roxburgh	12.130	65	.150	.222	59.9	8.5	40	10.55
Selkirk	12.820	79	.163	.219	92.2	14.2	15	9.20
Stirling	13.270	432	.182	.252	274.6	46.4	47	9.46
Sutherland	27.246	7	.187	.241	17.5	3.1	94	18.43
West Lothian/								

TABLE A - 3 (Contd.)

Education Area	Education Expend. per head 1959/60	Density: Population per sq. mile	Ratio of Scholars to population	Ratio of children Under 15 to population	Population per mile of road	Pupils per mile of road	Ratio of Landward to total population as a percentage	General Grant per head
Counties (Contd.)								
West Lothian	£13.100	772	.190	.270	283.6	51.4	55	£ 9.99
Wigtown	14.471	60	.178	.274	51.6	9.2	56	11.13
Zetland	20.587	32	.161	.222	26.2	4.2	70	13.42